DVB-s Card Overview

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Chapter 1

Introduction

TODO: URL of site price of card photo of card CI module ? Chipset ? compatible with linux ? separate driver ? in kernel ? /dev/video ? user experiences ? "card also known as"

matrix of all cards

sectionLifeView FlyDVB-S /Acorp TV134DS http://www.acorp.ru/products/multimedia/satellite/ www.acorp.com.tw ??? sectionLifeView FlyDVB Trio ???

digitalnow == twinnhandtv 1034 ?

overview of linunx chipsets

overview of all components involved in a dvb-s setup

vocabulary and abbreviation list

10moons天敏

Chapter 2

10moons

http://www.10moons.net

2.1 PCI DVB-S

http://www.10moons.net/productInfo.asp?PID=501

This PCI DVB-s card from 10moons is described on the website as

> "dvb-s is a PCI TV card that support DVB-S standard; support MPEG-2 of DVB system; DVB-S protocol compliant,support record and time-scheduling record function"

and lists the following features:

- Time shifting function let you never miss excellent part
- Full Function Infrared Remote Control
- 16-Channel preview
- watch tv program in your PC

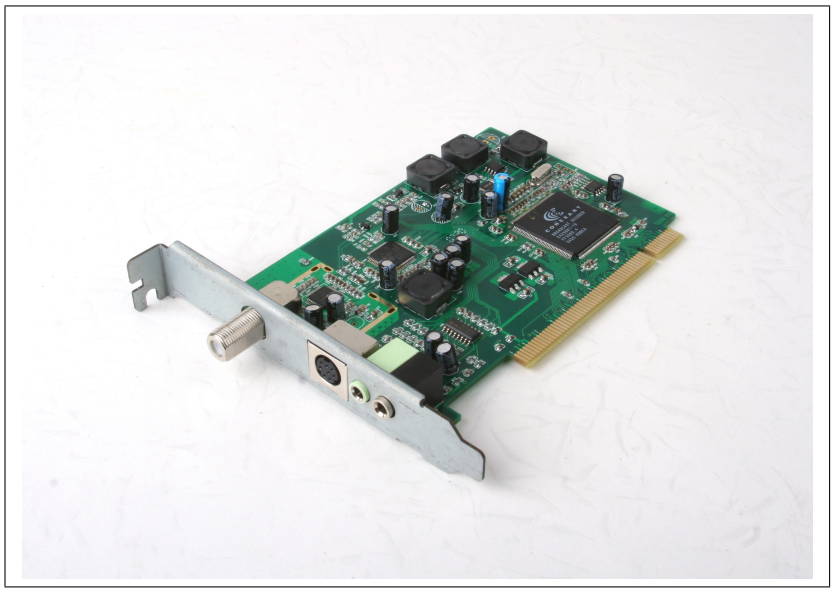

Figure 2.1: 10moons PCI DVB-s

- dvb-s is a PCI TV card that support DVB-S standard
- recording playback,picture preview funtion
- Supports still image capture in JPEG or BMP format
- support Windows2000/XP

I could not find any technical specifications or even a user's manual. I did find a driver on the website, which seems to indicate that this card uses a "Conexant 2388x" chipset.

FIXME

Chapter 3

ADS

http://www.adstech.com

3.1 Instant DVB-S PCI (PTV-341)

http://www.adstech.com/products/PTV-341/intro/PTV-341_intro.asp

This card has been discontinued according to the ADS website (http://www.adstech.com)

Figure 3.1: ADS Instant DVB-S PCI (PTV-341)

Chapter 4

AnySee

http://www.anysee.com

4.1 E30 PS Plus (PCI)

http://www.anysee.com/eng/product/anyseeE30PSPlus.php

The E30 PS Plus card from AnySee is described as[1]

> "anysee E30PS Plus is an Internal and effective DVB-S Card with smart card interface that allow for connection to DESKTOP PC via USB 2.0."

- Smart Card Support
- Working with Prog DVB
- USB 2.0 compatible: Watch Digital TV with USB 2.0 port.

[1] I had to type all that in manually, because the site is not in text-form, but on an image...

Figure 4.1: AnySee E30 PS Plus

- Real time & Scheduled Recording Function (PVR): Record your favorite TV programs to you hard disk.
- Electronic Program Guide (EPG): EPG Tables provide updated channel information.
- Teletext & Subtitle function support: Support Quick Access Teletext and Subtitle.
- Still Frame Capture function: Capture high quality still frames while watching TV.
- Time shift function: Pause live TV with Time shift function. Replay a scene while in Time shift.
- DiSEqC 1.0 & 1.2 Support
- USALS Support
- BDA Driver Support

Again, I could not find any technical specifications or manuals on the site or through google.

Chapter 5

Argolis

http://www.argolis.com

5.1 DVB-S PCI card (ARG6068)

http://www.argolis.com/catalog/product_info.php?cPath=26&products_id=33

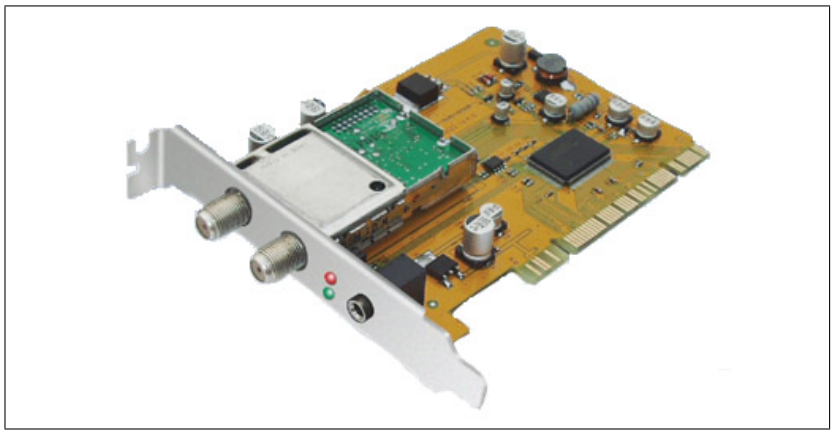

Figure 5.1: Argolis DVB-S PCI ARG6068

"Enjoy digital satellite programs and radio on PC with outlet of PCI. Not only Internet applications can receive the TV program and radio, but also record your favorite high-definition programs synchronously; you can use regular playing-software like progDVB."

- Support DVB agreement
- Receive the digital satellite program and radio program
- Real time digital record function (DVR) and make appointment record different channel
- Sleeping recording
- Time-shifting
- Electronic menu of recording program
- Preview program channels (only the free channels)
- Auto-scan channels
- Compressed format and recording : MPEG-II
- Upgrade available software
- Record the program directly which you see on the screen
- Select static- state picture
- Auto detect signal
- Favorite Channel list editor
- Support caption
- Support remote-controller
- Pin protection

The Argolis webshop lists this card and has a link with "more information", pointing back to the Argolis site. But I can not find any technical information or manuals on the argolis site or google.

Chapter 6

AverMedia

http://www.avermedia.com

6.1 AverTV DVB-s (M199)

http://www.avermedia.com/EN/Default.aspx?TYPE=vipplayercard.htm&PT=product&tv_TCAT_POS=0&CATNO0=B&CATNO1=BA&CATNO2=BAA&CATNO3=BAA1&CATNO4=BAA1C&CNT=4&PID=4710710670511

> "Digital Satellite TV and Radio on PC!! The AVerMedia AVerTV DVB-S is a Digital Satellite Receiver Card which allows you to access free-to-air digital satellite TV and radio on your PC."
>
> "Use it to record and save TV programs directly to your in MPEG-2 format. You can even hook it up to your home video entertainment system with the additional AV and S-Video input. It also has a unique feature of allowing you to pause a live broadcast and continue from where you left with the TimeShift function. The AVerTV DVB-S includes a fully featured infrared remote control that allows you to access each feature with ease."

- Watch Free-to-Air Digital Satellite TV and Listen to Digital Radio on PC

Figure 6.1: AverMedia AverTV DVB-s (M199)

  - Full resizable TV(up to full screen)
  - Auto channel scan and automatic channel name recognition
- Personal Digital VCR(Personal Video Recorder)
  - Pause, rewind and instant replay live TV program
  - Playback your recorded programs while continuing to record in real time(TimeShift)
  - Record/Playback live TV programs and video in MPEG-2 quality
  - Recording scheduler
- Changeable Control Panel Skin Display
- 16-Channel Preview
- Fully Functional Infrared Remote Control

Unlike the previous cards, this manufacturer lists technical specifications on it's website:

> Input Signal: 75 Ohm digital TV antenna, Composite Video, S-Video

But it's not much help...

Also unlike the previous cards, this one has a 52-page User Manual. http://www.avermedia.com/images/www.avermedia.com_EN/UM_M199_AP1.4_EN.pdf

unfortunately, after downloading this document (at 3KB/s), it revealed nothing useful (it describes how to use the Windows software)

6.2 AverTV DVB-s Hybrid+FM (A700)

http://www.avermedia.com/EN/Default.aspx?TYPE=vipplayercard.htm&PT=product&tv_TCAT_POS=0&CATNO0=B&CATNO1=BA&CATNO2=BAA&CATNO3=BAA1&CATNO4=BAA1C&CNT=4&PID=4710710671426

Figure 6.2: AverMedia AverTV DVB-s Hybrid+FM (A700)

"Watch Free-to-Air Digital Satellite TV, Analog TV and Listen to Radio on Your Desktop !"

"AVerTV DVB-S Hybrid+FM is a Digital Satellite Receiver Card, which allows you to access most worldwide digital satellite TV channels beyond geographic boundary on your desktop with sharp picture quality. To fulfill a variety of customers' needs, AVerMedia DVB-S Hybrid+FM offers "Satellite Internet Access" service, an exciting feature to enjoy the fun of surfing on web at high download speed on your desktop. What is more, another value-added function is that AVerMedia DVB-S Hybrid+FM can support Windows XP Media Center Edition (MCE) operating system to further catch up the wave of digital home entertainment.

With AVerMedia DVB-S Hybrid+FM, you can not only record and save TV programs directly to your PC in MPEG-2 format but also even hook it up to your home

video entertainment system with the additional AV and S-video input. Moreover, a fully featured infrared remote control is included to make you to access each feature with ease."

- Personal Video Recorder (PVR)
- TimeShift
- Schedule Recording into MPEG-1/2 formats
- Channel Management
- Fast Channel Switching and Scanning
- PIP (Picture-in-Picture) / POP (Picture-on-picture)
- 16-Channel Preview
- Complete Channel Scan Capability
- Blind-Scan
- Multi-User Settings
- Channel Remapping
- Auto Power Off
- Wake-up from S3 (Stand By) /S4 (Hibernate) mode
- Sleep Timer
- Video Quality Enhancement
- Audio Effect Adjustment
- Internet via Satellite
- Worldwide analog TV Access (Optional)
- Free-to-air DVB-S
- FM radio (Optional)
- Worldwide Stereo sound
- Windows XP MCE 2005 Compliant (DVB-S only)
- Highest quality silicon TV tuner
- Complete Channel Scan Capability
- 32/64-Bit Support

The datasheet (http://www.avermedia.com/images/www.avermedia.com_EN/AVerTV%20DVB-S%20Hybrid+FM(A700).pdf) doesn't contain any data I need, but it's a good summary of the card and more nicely formatted than the webpage. The usermanual (http://www.avermedia.com/images/www.avermedia.com_EN/UM_A700_6.0.7_EN.pdf) was again a slow download without much information.

6.3 AverTV DVB-s Pro (A700)

http://www.avermedia.com/EN/Default.aspx?TYPE=vipplayercard.htm&PT=product&tv_TCAT_POS=0&CATNO0=B&CATNO1=BA&CATNO2=BAA&CATNO3=BAA1&CATNO4=BAA1C&CNT=4&PID=4710710671310

Figure 6.3: AverMedia AverTV DVB-s Pro (A700)

"The AVerTV DVB-S Pro is a digital satellite receiver card, which allows you to access free-to-air digital satellite TV and digital radio in on your PC."

"AVerMedia now has come up with a new product! The AVerTV DVB-S Pro is a digital satellite receiver card, which allows you to access free-to-air digital satellite TV and digital radio in on your PC. It can be used to record and save TV programs directly to your PC's hard disk in MPEG-2 TS format.

You can even hook it up to your home video entertainment system with the additional AV and s-video input. It's also packed with a unique feature of allowing you to pause a live broadcast and continue from where you left with the Time Shift function. The AVerTV DVB-S includes a fully featured Infrared Remote Control that lets you access every feature with a simple press of a button."

- Watch free-to-air digital satellite TV program and listen to digital radio on PC
  - Fully Resizable TV (up to full screen)
  - Auto channel scan and automatic channel name recognition

- Personal Digital VCR(Personal Video Recorder)
  - Pause rewind and instant replay live TV program
  - Play back your recorded programs while continuing to record in real time(Time Shift)
  - Record/ Playback Live TV programs and video in MPEG-2 quality
  - Recording Scheduler
- Changeable Control Panel Skin
- 16-Channel preview
- Support single and multiple still image capture
- Video Always on Top
- Support WindowsOS 98SE/ME/2000/XP
- Fully Functional Remote Control

This card is the same as the previous one[1], except for the FM radio tuner. While the datasheet (http://www.avermedia.com/images/www.avermedia.com_EN/AVerTV%20DVB-S%20Pro(A700).pdf) is different, the user manual is the same as for the Hybrid+FM card.

[1] or that is what I make up from the type number A700

Chapter 7

Compro

http://www.comprousa.com

7.1 Videomate S300

http://www.comprousa.com/New/en/product/s300/s300.html

Compro VideoMate S300 is a digital satellite TV tuner card for watching and recording free-to-air high quality DVB-S TV shows on your PC. VideoMate S300 accompanied by Compros Picture Purifying Technology, Philips 9-bit ADC chip, with advanced silicon tuner to provide superior HDTV video quality. It brings a world of enhanced TV services directly to your PC, turning your computer into a home entertainment center by bringing digital TV viewing and digital video recording capabilities to your PC.

More than these, VideoMate S300 supports DiSEqC V1.2, Transport Stream and MPEG-2 digital TV record/playback to get the best experience in DVB-S TV reception, moreover, S300 support 3rd party satellite TV PVR software as well. In addition, VideoMate S300 provides many useful and unique features in software: timeshifting, channel surfing, still frame capture, digital EPG, subtitle and Teletext, advanced picture in/out picture to watch live TV/playback video files at the same time and support up to 4 digital channel windows watch, customize channel order and my favorite channel list for more easy-to-use, Video Desktop to setup your live TV screen as wallpaper

Figure 7.1: Compro Videomate S300

mode, customize brightness, hue, saturation, contrast, and TV audio in each TV channel. VideoMate S300 is also a video capture card that can capture analog video from S-Video or Composite for MPEG-1/2/4 formats recording.

Complete with the remote control and bundled with Compros exclusive ComproDTV 2, ComproDVD 2 and Ulead PhotoExplorer 8.5 SE software, VideoMate S300 gives users a complete and convenient control solution for easy DVB-S viewing and recording. By completely integrated the excellent hardware and software supports, and rich package, Compro unleashes the convenience of video technology to enjoy your life, and brings you the continuous innovation in high video quality experience. VideoMate S300 turns your desktop into a digital entertainment center and brings a world of enhanced TV services directly to your PC and definitely your best choice.

- Silicon digital satellite TV tuner with Philips 9-bit ADC
- Watch DVB-S digital satellite TV shows on your PC
- Supports DiSEqC Version 1.2
- Supports SDTV and 1080i HDTV (where available)
- Advanced PIP/POP features up to 4 sub channels watching
- Video Desktop to setup the live TV screen as wallpaper
- Customize Brightness, Hue, Saturation, Contrast, and audio selection in each TV channel
- Digital TV supports MPEG-2 and Transport Stream recording
- Capture analog video from S-Video and Composite
- Analog video capture supports MPEG-1/2/4 formats recording
- Analog video capture supports pause while recording and automatic spilt file size

- Timeshifting, channel surfing, and still frame capture
- Supports audio and language selection in available channels
- Supports EPG, subtitle and Teletext (where available)
- Fully functional IR remote control for TV and DVD playback
- Microsoft BDA driver

7.2 Videomate S350

http://www.comprousa.com/New/en/product/s350/s350.html

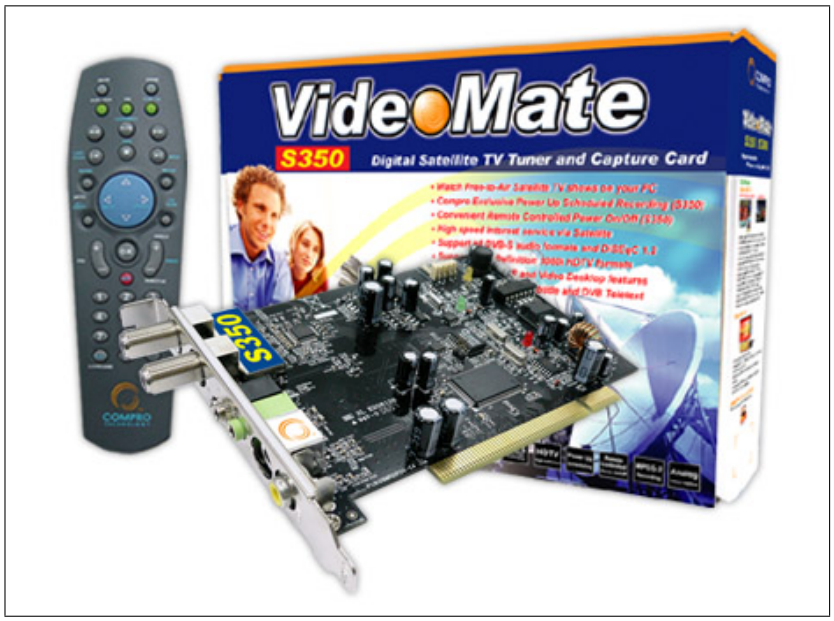

Figure 7.2: Compro Videomate S350

VideoMate S350 is a powerful digital satellite TV tuner card with analog video/audio capture. It accompanies Philips 9-bit ADC chip, the state-of-the-art silicon digital TV tuner, Compro Picture Purifying Technology, and Power Up Technology to provide superior HDTV video quality reception on your PC. Not only watching free-to-air high quality DVB-S TV shows on your PC as a regular DVB-S card, accompanied by Compros exclusive Power Up Technology - it can automatically boot up your system from the Windows Shut Down (ACPI S5), Stand by (ACPI S3), or Hibernation (ACPI S4) mode and record your favorite shows, then ComproDTV 2 will automatically shutdown your system when recording is completed. Friendly Remote controlled power on/off - to enhance the home entertainment PC experience, users can power up and shutdown their PC with the bundled ergonomic design remote control.

More than these, VideoMate S350 supports DiSEqC V1.2, Transport Stream and MPEG-2 digital TV record/playback to get the best experience in DVB-S TV reception, moreover, S350 support 3rd party satellite TV PVR software as well. In addition, VideoMate S350 provides many useful and unique features in software: timeshifting,

channel surfing, still frame capture, digital EPG, subtitle and Teletext, advanced picture in/out picture to watch live TV/playback video files at the same time and support up to 4 digital channel windows watch, customize channel order and my favorite channel list for more easy-to-use, Video Desktop to setup your live TV screen as wallpaper mode, customize brightness, hue, saturation, contrast, and TV audio in each TV channel. VideoMate S350 is also a video capture card that can capture analog video from S-Video or Composite for MPEG-1/2/4 formats recording.

Complete with a 37-key remote and bundled with Compros exclusive ComproDTV 2, ComproDVD 2 and Ulead PhotoExplorer 8.5 SE software, VideoMate S350 gives users a complete and convenient control solution for easy DVB-S viewing and recording. By completely integrated the excellent hardware and software supports, and rich package, Compro unleashes the convenience of video technology to enjoy your life, and brings you the continuous innovation in high video quality experience. VideoMate S350 turns your desktop into a digital entertainment center and brings a world of enhanced TV services directly to your PC and definitely your best choice.

- Silicon digital satellite TV tuner with Philips 9-bit ADC
- Watch DVB-S digital satellite TV shows on your PC
- Compro Exclusive Power Up Scheduled Recording
- Convenient Remote Controlled Power On/Off
- Supports DiSEqC Version 1.2
- Supports SDTV and 1080i HDTV (where available)
- Advanced PIP/POP features up to 4 sub channels watching
- Video Desktop to setup the live TV screen as wallpaper
- Customize Brightness, Hue, Saturation, Contrast, and audio selection in each TV channel
- Digital TV supports MPEG-2 and Transport Stream recording
- Capture analog video from S-Video and Composite
- Analog video capture supports MPEG-1/2/4 formats recording
- Analog video capture supports pause while recording and automatic spilt file size
- Timeshifting, channel surfing, and still frame capture
- Supports audio and language selection in available channels
- Supports EPG, subtitle and Teletext (where available)
- Fully functional IR remote control for TV and DVD playback
- Microsoft BDA driver

This card looks to be the same as the VideoMate S300, except that it has 2 extra features: powers up on scheduled recording, and power on/off through remote control.

Chapter 8

Creatix

http://www.creatix.com

8.1 CTX929

http://www.creatix.com/produkte/multimedia/ctx929.htm

Creatix is not very talkative about its products, but it provides a datasheet with technical data: http://www.creatix.com/produkte/multimedia/datenblatt/CTX929V2_spec.pdf

> CTX929 V.2 is a digital satellite tuner card used for direct conversion of QPSK-modulated RF-signals into its and Q baseband components

- Transparent for all satellite transmission standards (BPSK, QPSK, 8- PSK, 16-QAM)
- Small outline dimensions
- Low power consumption

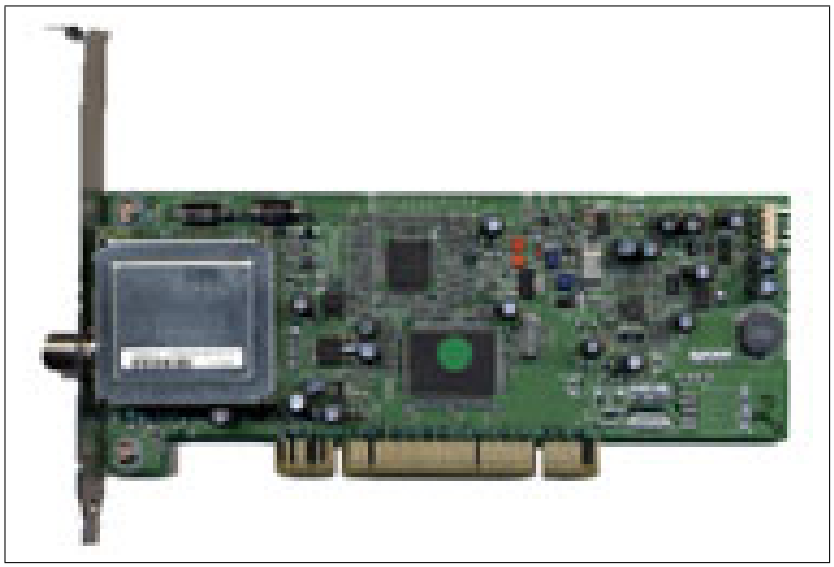

Figure 8.1: Creatix CTX929

- Excellent input level sensitivity
- Symbol rate range from 1 to 45 Ms/s
- Baseband demodulated I,Q-outputs
- Direct conversions concept
- I2C bus control of tuning functions
- DISEqC 1.0,1.2 compatible

As main chip, it lists: "SD1878/SHA, SAA7134HL, TDA10086HT"

8.2 CTX948

http://www.creatix.com/produkte/multimedia/ctx948.htm

CTX948 V.1 supports analog TV, DVB-T, DVB-S and S-Video/ Composite Video-In/Audio-In.

- low profile PCI card
- PCI 2.2 compliant

The CTX948 supports analog TV, DVB-T and DVB-S. The datasheet at http://www.creatix.com/produkte/multimedia/datenblatt/CTX948%20V1%20Specification.pdf contains a whole lot of information on the different chipsets, but not all of these are relevant.

The chipset used for DVB-S is "Philips TDA8262/3" and has the following features according to the datasheet:

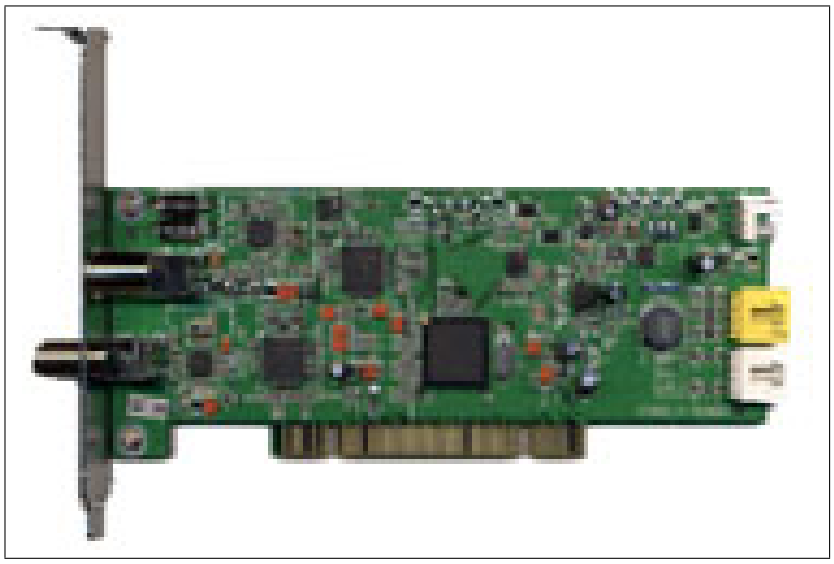

Figure 8.2: Creatix CTX948

- Direct conversion demodulation for QPSK and 8PSK (Zero IF)
- 950 to 2,175 MHz frequency range
- +3.3 V DC supply voltage (no 5 V or 30 V supply required)
- Low power (¡600mW)
- Low phase noise fully integrated oscillator
- Cost optimized application
- High range input level -70 to 0 dBm @ 75 _ input impedance
- Low noise RF input (integrated LNA)
- High AGC range with high AGC linearity
- Optimized interface with Philips digital satellite demodulators TDA10086

8.3 CTX952

http://www.creatix.com/produkte/multimedia/ctx952.htm

The CTX952_V.1 DVBS-S2 supports DVB-S, DVBS-S2, S- Video/Composite Video-In/Audio-In.

- PCI 2.2 compliant

Like the CTX948, the CTX952 can be used for analog TV and DVB-s, but unlike the CTX948, it also understands DVB-S2. The datasheet (http://www.creatix.com/produkte/multimedia/datenblatt/CTX952_V1.pdf) talks about the CX24118A and CX24116 chipsets for DVB-s, with detailed information on their usage:

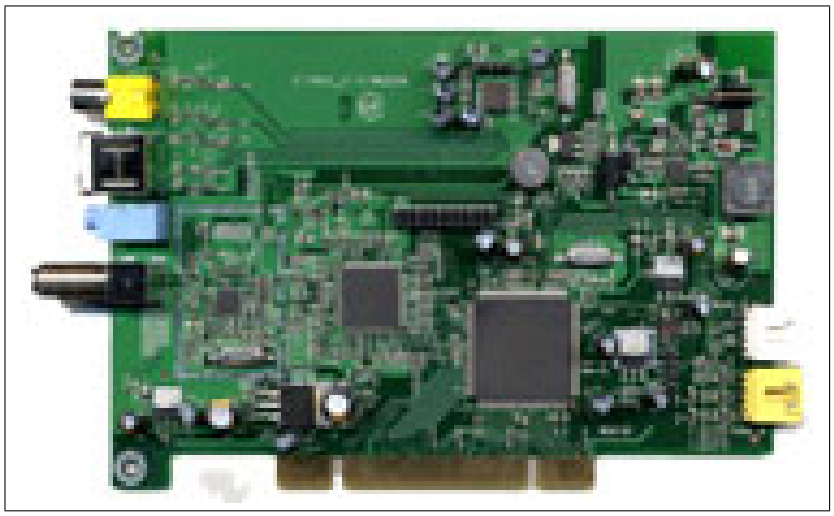

Figure 8.3: Creatix CTX952

CS24118A - Advanced Modulation Digital Satellite Tuner The CX24118A is a highly integrated direct conversion tuner requiring a minimum of off-chip components. It incorporates a low-noise amplifier with integrated Voltage Controlled Attenuator (VCA), quadrature down converter, variable bandwidth baseband filter/amplifier, fractional synthesizer, crystal oscillator with buffered output, and an automatic tuning system. The chip is controlled through a multi-byte read/ write enabled I2C-compatible interface.

CS24116 - Advanced Modulation DVB-S II demodulator and FEC decoder The CX24116 complies with the open DVB-S2 standard for advanced modulation (8PSK modulation with LDPC/BCH Forward Error Correction), as well as DVB-S and DTV Legacy specifications. When combined with a satellite tuner, such as the CX24118A, the CX24116 provides a complete broadband satellite front-end solution for DVB-S2 satellite set-top boxes.

Chapter 9

Dexatek

http://www.dexatek.com

9.1 DK-5701 I-TEK Sphere DVB-S PCI Card

http://www.dexatek.com/product_dk-5701.asp

DEXATEK DK-5701 is a professional digital satellite TV card which allows you to watch high quality digital TV simply on your PC. A great deal of practical functions such as instant recording, time-shifting, EPG, Teletextare easy to use by an amiable interface. In addition, DEXATEK DK-5701 brings the most stable and fastest Internet via satellite into your PC, and you can surf on web at high download speed!

Features:

- High quality digital satellite TV & radio receiving (DVB-S) supports only free-to-air programs
- High speed Internet via satellite – You need to apply an Internet ISP account first
- Instant recording – Record digitally as MPEG II format. 1 hour digital TV program is about 1.7G

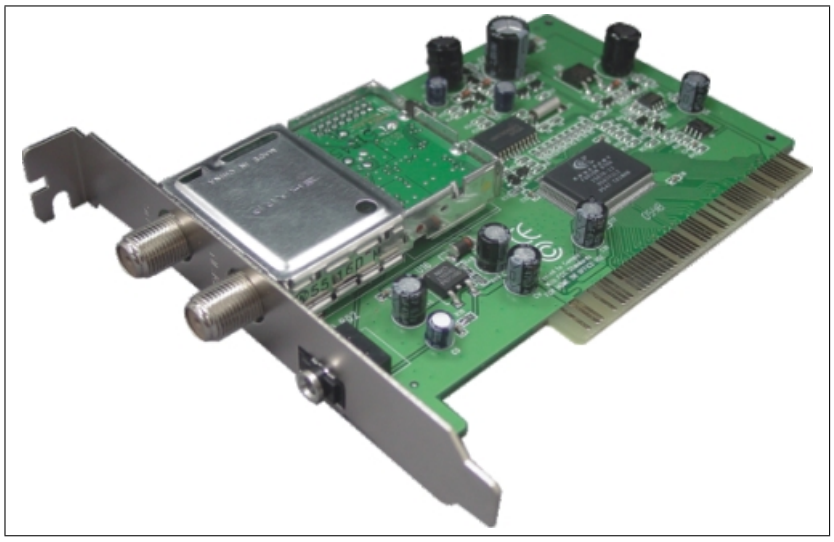

Figure 9.1: Dexatek DK-5701 I-TEK Sphere DVB-S PCI Card

- Schedule recording – You can set your own recording list and playback whenever you like
- Time-shifting – You can pause live TV shows and never miss any marvelous moment!
- Electronic program guide (EPG) – EPG tables offer the most updated channel information
- Teletext – Teletext page is only available in certain areas
- Still frame capture
- Multi channel preview matrix
- Support DiSEqC1.2 & USALS
- Transponder & satellite auto scan
- Viewing & schedule recording different channels simultaneously
- 16:9 wide screen
- Multi-language output
- Hot Keys
- Favorite list
- Video quality adjustment
- MPEG II software decoding
- Software upgradeable
- Support remote control

The minimum system requirements for this card are, among other things, a 500MHz CPU. That's in heavy contrast with other cards so far which are to be used with a Pentium 4 CPU.

I could not find a manual online.

Chapter 10

Digitalnow

http://www.digitalnow.com.au

10.1 DNTV Live! QuattroS

http://www.digitalnow.com.au/product_pages/QuattroS.html

The Ultimate TV Tuner device. Another World First and exclusively available from DigitalNow and approved resellers.

Four tuners on one PCI-e card. This device is equipped with two DVB-S tuners and two Hybrid (Digital or Analogue) tuners supporting FTA Digital TV (satellite and Terrestrial) as well as Analogue TV and FM radio broadcasts. Supports all Australian DVB-T formats including 1080iHDTV (MP&HL) and AC3 Audio.

- Support DVB-S Protocol (EN 300 421)
- Support DVB-T Protocol (EN 300 744)
- Support DVB-Data Protocol (EN 301 192)

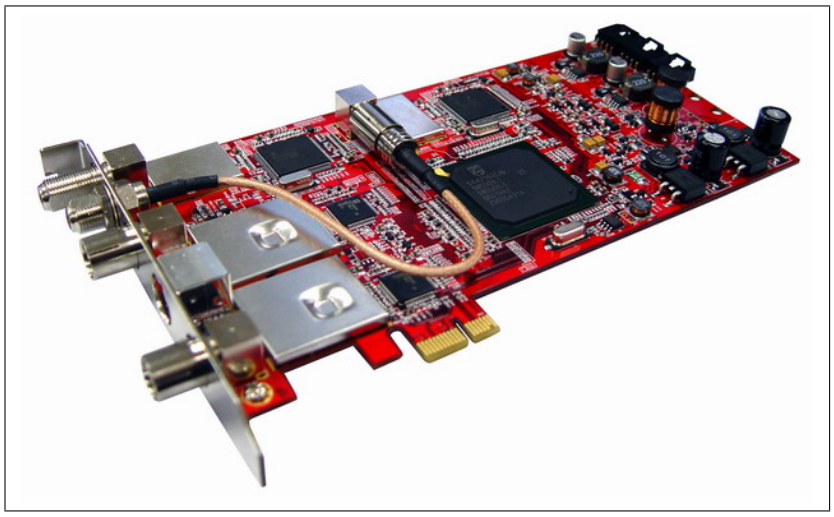

Figure 10.1: Digitalnow DNTV Live! QuattroS

- Support NTSC / PAL / SECAM Analog TV System*
- PCI Express Standard
- Dual DVB-S Tuners and Dual DVB-T/Analog Tuners
- Dual Analog Video Capture (S-Video In / Composite Video In)*
- DVB-S DiSEqC 1.2 / USALS Support
- Advanced Signal Routing Technology (eg use one or two RF inputs to feed both tuners in WinXP) please read the Readme.txt file in the drivers archive for details of how to do this.

It seems like DigitalNow is a provider of digital TV, and not a hardware manufacturer. I don't know who made this card...

A perhaps interesting note on the website says:

> Please note the dimensions of the card (200x95mm) is such that may not fit in smaller PC cases, we suggest you check that space is available prior to purchasing.

The card is also a PCI-e card and currently out of stock.

Chapter 11

Digital Rise

http://www.digitalrise.biz

11.1 DVB-S PCI Sat FTA (1020A)

http://www.digitalrise.biz/products/dvb_tuner/sat/pci_fta/

Satellite PCI card designed for Free-To-Air channels.

- Digital satellite TV & radio channels receiving
- High speed Internet via satellite (you need to apply an Internet ISP account first)
- DVB data service
- Support MPE (multiprotocol encapsulation)
- Support DiSEqC1.2 & USALS
- Real time Digital Video Recording (DVR) and Scheduling Recording
- Viewing and recording different channels simultaneously

Figure 11.1: Digital Rise DVB-S PCI Sat FTA (1020A)

- Time-shifting: You can pause live TV shows and never miss any marvelous moment
- EPG (Electronic program guide)
- Teletext
- Still frame capture
- Multi channel preview matrix
- 16:9 wide screen
- Favorite list
- Hot Keys
- Channel auto scan
- Video quality adjustment
- MPEG II software decoding
- Support remote control
- Software is upgradeable

There is an uncanny resemblence between the 1034 and 1041 cards from Digital Rise and those from TwinHan. This makes me believe that the 1020A is also a TwinHan card, although TwinHan no longer lists it on its site.

Figure 11.2: Digital Rise DVB-S PCI Sat CI (1034)

11.2 DVB-S PCI Sat CI (1034)

http://www.digitalrise.biz/products/dvb_tuner/sat/pci_ci/

Satellite PCI card with designed-in common interface. Allows you to receive both free-to-air & scrambled channels and is compatible with most of CAMs currently in the market.

- Digital satellite TV & radio channels receiving
- Built-in Common Interface for receiving Pay-TV channels
- High speed Internet via satellite (you need to apply an Internet ISP account first)
- DVB data service
- Support MPE (multiprotocol encapsulation)
- Support DiSEqC1.2 & USALS
- Real time Digital Video Recording (DVR) and Scheduling Recording
- Viewing and recording different channels simultaneously
- Time-shifting: You can pause live TV shows and never miss any marvelous moment
- EPG (Electronic program guide)
- Teletext
- Still frame capture
- Multi channel preview matrix

- 16:9 wide screen
- Favorite list
- Hot Keys
- Channel auto scan
- Video quality adjustment
- MPEG II software decoding
- Support remote control
- Software is upgradeable

The only difference between this card and the 1020a, is the CI interface. And again, this card looks exactly like the TwinHan 1034 card.

11.3 DVB-S2 PCI Sat CI (1041)

http://www.digitalrise.biz/products/dvb_tuner/sat/pci_ci_dvbs2/

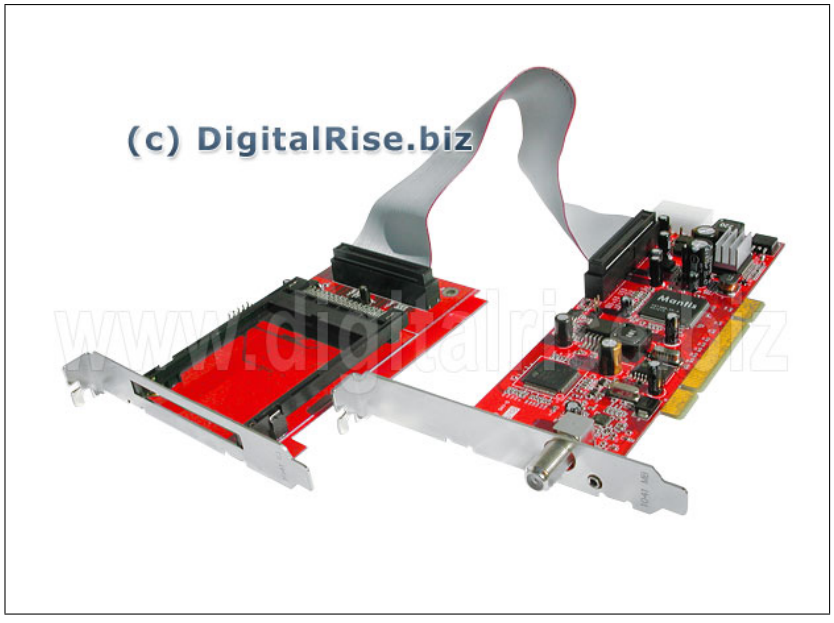

Figure 11.3: Digital Rise DVB-S2 PCI Sat CI (1041)

New Satellite PCI card with DVB-S2 & full HDTV (H.264) support and designed-in common interface. Allows you to receive both free-to-air & scrambled channels and is compatible with most of CAMs currently in the market.

- Digital satellite TV & radio channels receiving

- Support HDTV (High Defination Television) for highest audio/video quality!
- Built-in Common Interface for receiving Pay-TV channels
- High speed Internet via satellite (you need to apply an Internet ISP account first)
- DVB data service
- Support MPE (multiprotocol encapsulation)
- Support DiSEqC1.2 & USALS
- Real time Digital Video Recording (DVR) and Scheduling Recording
- Viewing and recording different channels simultaneously
- Time-shifting: You can pause live TV shows and never miss any marvelous moment
- EPG (Electronic program guide)
- Teletext
- Still frame capture
- Multi channel preview matrix
- 16:9 wide screen
- Favorite list
- Hot Keys
- Channel auto scan
- Video quality adjustment
- MPEG II software decoding
- Support remote control
- Software is upgradeable

This card has the same features as the 1034, except that this one supports HDTV (and DVB-s2 obviously). And it looks the same as the TwinHan 1041.

DIGIWAV

Chapter 12

Digiwave

http://www.digiwavetechnologies.com

12.1 DGP-103G

http://www.digiwavetechnologies.com/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=162&MMN_position=173:7

***This Card using the high technologies design, not like the other satellite PCI have many over heat problem.

***This is new generation card, better than 1020a, 1022a and 102G

Digiwave 103G Satellite TV cards is a professional digital satellite TV card which allows you to watch high quality digital TV simply on your PC. A great deal of practical functions such as instant recording, time-shifting, EPG, teletext are easy to use by an amiable interface.

This card let you do many things you can not do with a regular Free to Air receiver.

This card let you receiver satellite TV and digital TV in a way you never could! A single DVB PCI card on your PC can offer more features than a Personal Video Recorder (PVR) like Tivo or Displayers, scheduling and recording of satellite TV and digital TV shows in digital quality.

- Watch free-to-air digital satellite TV program and listen to digital radio on PC

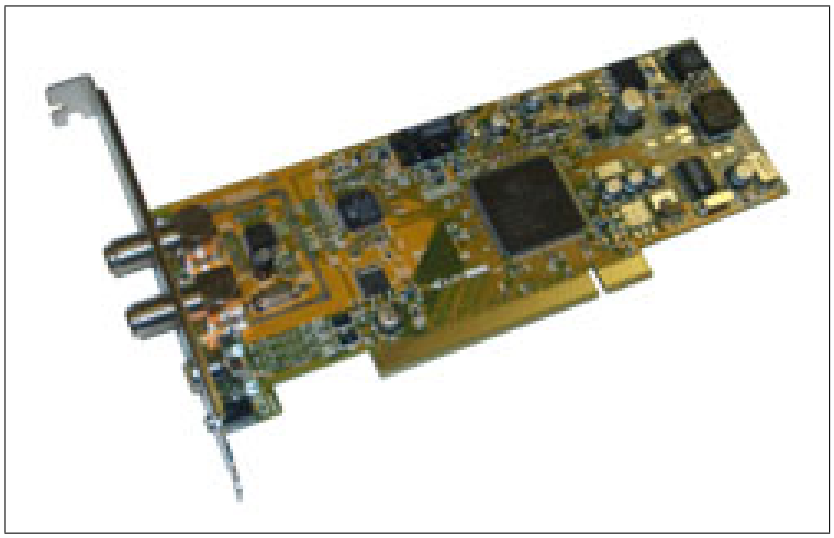

Figure 12.1: Digiwave DGP-103G

  - Fully Resizable TV (up to full screen)
  - Auto channel scan and automatic channel name recognition
- Personal Digital VCR (Personal Video Recorder)
  - Pause, rewind and instant replay live TV program
  - Play back your recorded programs while continuing to record in real time (Time Shift)
  - Record/ Playback Live TV programs and video in MPEG-II quality
  - Recording Scheduler
- Support single and multiple still image capture
- Video Always on Top
- Support Windows 98SE/ME/2000/XP
- Fully Functional Remote Control (USB)
- Support ProgDVB and its plugins

Most of these features are exactly the same as on the AverMedia AverTV DVB-s (M199), even down to the enumeration order and structure.

12.2 DGP-108G

http://www.digiwavetechnologies.com/index.php?module=pagemaster&PAGE_user_op=view_page&PAGE_id=226

Digiwave 108G is a DVB-S/Analogue TV/FM radio/Internet card, which allows you to access digital satellite TV, Cable TV, Air TV and FM radio on your PC, and uses internet via satellite. DGP-108G can record your favorite programs, playback

Figure 12.2: Digiwave DGP-108G

and capture whenever you like and further burn them into VCD/DVD. It support Time-Shifting, EPG, teletext, instant and scheduled recording while you are watching DVB-S TV and analogue TV

- Access DVB-S + Analog + FM + Internet function all in one Card
- Support video capture via Video-in
- High-sensitivity silicon tuner for all worldwide TV systems(PAL/SECAM/NTSC)
- Support A2, NICAM, SAP and stereo programs for analogue TV
- TV function: SAP (language optional), Electronic Program Guide (EPG), transponder, region, and frequency range auto scan.
- Support single and multiple still images capture
- Record MPEG2, MPEG4, MP3, MP4, VCD, DVD, SVCD, WMV, WMA.
- Support ProgDVB and its Plugins
- Time-Shifting function
- Full function remote control

Again, I couldn't find a manual online.

Chapter 13

DVBWorld

http://www.dvbworlds.com

13.1 DVB-S PCI2002 STB for Satellite

http://www.dvbworlds.com/pci-s%20PCI2002.htm

DVBWorld Sat is a professional digital satellite TV card which allows you to watch high quality digital TV simply on your PC.A great deal of practical functions such as instant recording,time-shifting,EPG,teletext... are easy to use by an amiable interface. In addition, DVBWorld Sat brings Internet via satellite into your PC, and you can surf on web at high download speed

- High quality digital satellite TV & radio receiving (DVB-S) – DVBWorld Sat supports only free-to-air programs
- High speed Internet via satellite – You need to apply an Internet ISP account first
- DVB data service –IP PID scanning and IP data broadcasting in LAN and IP MPEG4 media playing and IP MPEG4 media recording
- MPEG 2 Video broadcasting in LAN
- Instant recording – Record digitally as MPEG II format. 1 hour digital TV program is about 1.7G
- Schedule recording – You can set your own recording list and playback whenever you like
- Time-shifting – You can pause live TV shows and never miss any marvelous moment!

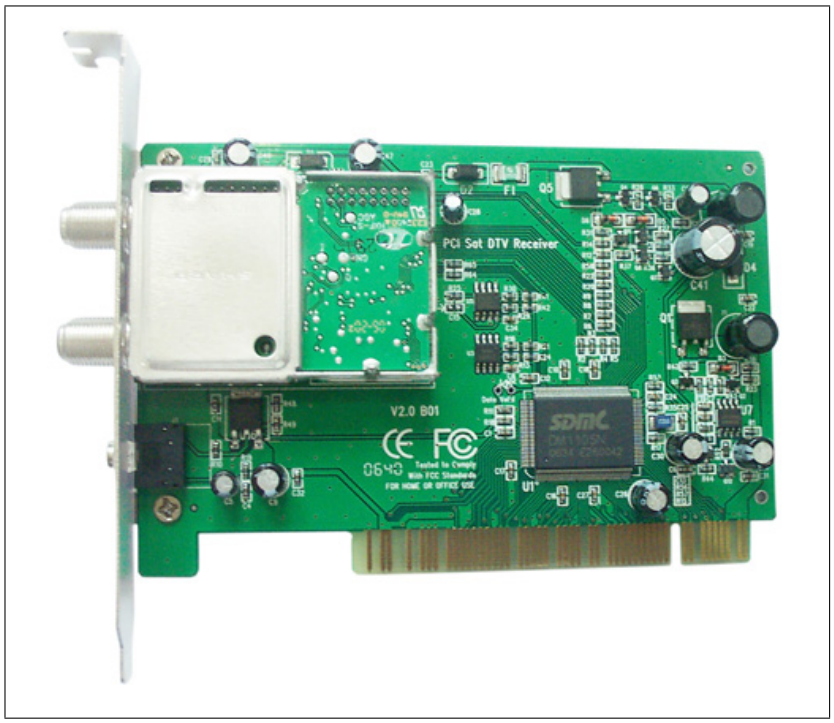

Figure 13.1: DVBWorld DVB-S PCI2002 STB for Satellite

- Electronic program guide (EPG) – EPG tables offer the most updated channel information
- Teletext – Teletext page is only available in certain areas
- Still frame capture
- Multi channel preview matrix
- Support DiSEqC1.2 & USALS
- Transponder & satellite auto scan
- Viewing & schedule recording different channels simultaneously
- 16:9 wide screen
- Multi-language output
- Hot Keys
- Favorite list
- Video quality adjustment
- MPEG II software decoding
- Software upgradeable
- Support remote control
- Support HDTV

This card apparently has a dual DVB-s tuner, but the specifications don't show it off very much.

13.2 DVB-S CI PCI2006 STB for Satellite

http://www.dvbworlds.com/PCI-CI-2006.htm

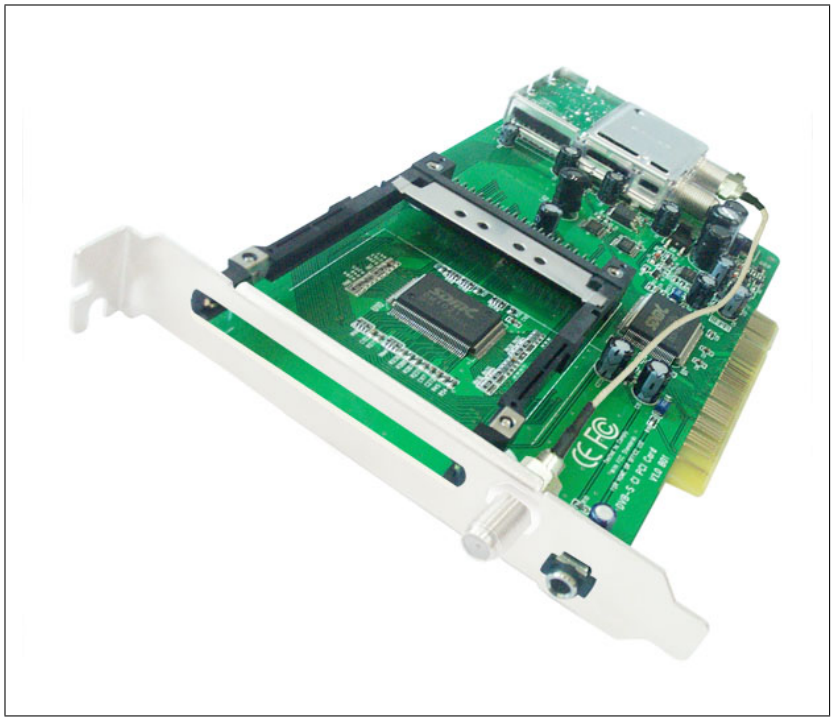

Figure 13.2: DVBWorld DVB-S CI PCI2006 STB for Satellite

DVBWorld Sat-CI is the first satellite TV card with designed-in common interface. No need to buy another daughter card, DVBWorld Sat-CI allows you to receive both free-to-air & scrambled channels by one signal card. In possession of strong core competence in source integration, DVBWorld Sat-CI is compatible with most of CAMs currently in the market. If you want buy a satellite TV card, DVBWorld Sat-CI is your best choice.

- High quality digital satellite TV & radio receiving (DVB-S)
- Designed-in common interface for pay TV receiving –You need extra CAM & subscribed smart card for pay channel reception
- High speed Internet via satellite – You need to apply an Internet ISP account first
- DVB data service
- Instant recording – Record digitally as MPEG II format. 1 hour digital TV program is about 1.7G
- Schedule recording – You can set your own recording list and playback whenever you like
- Time-shifting – You can pause live TV shows and never miss any marvelous moment!
- Electronic program guide (EPG) – EPG tables offer the most updated channel information

- Teletext – Teletext page is only available in certain areas
- Still frame capture
- Multi channel preview matrix
- Support DiSEqC1.2 & USALS
- Transponder & satellite auto scan
- Viewing & schedule recording different channels simultaneously
- 16:9 wide screen
- Multi-language output
- Hot Keys
- Favorite list
- Video quality adjustment
- MPEG II software decoding
- Software upgradeable
- Support remote control
- Support HDTV

The specifications also include a list of compatible CAMs which fit in the CI-slot.

Compatible CAM	Version
AlphaCrypt	1.0
Aston I	1.05
Astoncrypt	1.03
BataCrypt	1.0
Conax	4.0/4.00e
Cryptoworks	1.0/12011
Irdeto	1.06/2.09
Nagravision	All
Pentacrypt	1.05
SECA I & II	1.05
Viaccess	1.0 V481/ V483
Zeta Cam	N/A

13.3 DVB-S PCI4002 STB for Satellite

http://www.dvbworlds.com/pci-s%20PCI4002.htm

Here comes an ideal satellite TV card for you! DVBWorldDTV DVB-S PCI4002 adopts high-tech silicon tuner that efficiently reduces the board size to adapt to the state-of-the-art chip tuner technique can filter the snowy and drill effect that always happens while watching TV and offers a better TV-watching experience. If you are a fan of satellite TV, DVBWorldDTV DVB-S PCI4002 is ideal choice for you!

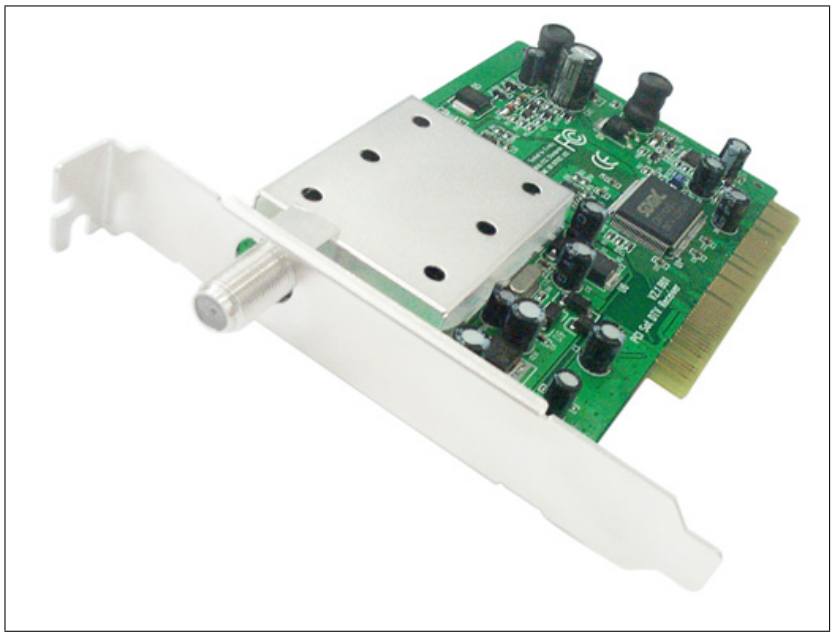

Figure 13.3: DVBWorld DVB-S PCI4002 STB for Satellite

- Support DVB-S Protocol (EN 300 744)
- Support DVB-Data Protocol (EN 301 192)
- Digital Satellite TV and Radio Program?Receiving
- Support HDTV (MPEG2&MPEG4/H.264) Receiving
- Real Time Digital Video Recording (DVR) and Scheduling Recording
- Time-Shifting
- Electronic Program Guide (EPG)
- Still Frame Capture
- Multi Free Channel Preview
- Subtitle
- Satellite / Transponder Auto Scan
- IP PID scanning, IP data broadcasting in LAN
- MPEG2 Video broadcasting in LAN, Generate IP data broadcasting task automatically
- IP MPEG4 media playing, IP MPEG4 media recording
- Favorite List
- Full Screen Display
- Multi language Switch
- MPEG-II Software Decoding
- Software Upgradeable

- DiSEqC 1.2 / USALS Support
- IR Remote Controller Available

The difference with the PCI2002 seems to be that this card only has 1 tuner instead of 2[1]

13.4 DVB-S2 PCI2004 STB for Satellite

http://www.dvbworlds.com/pci-s2-pci2004.htm

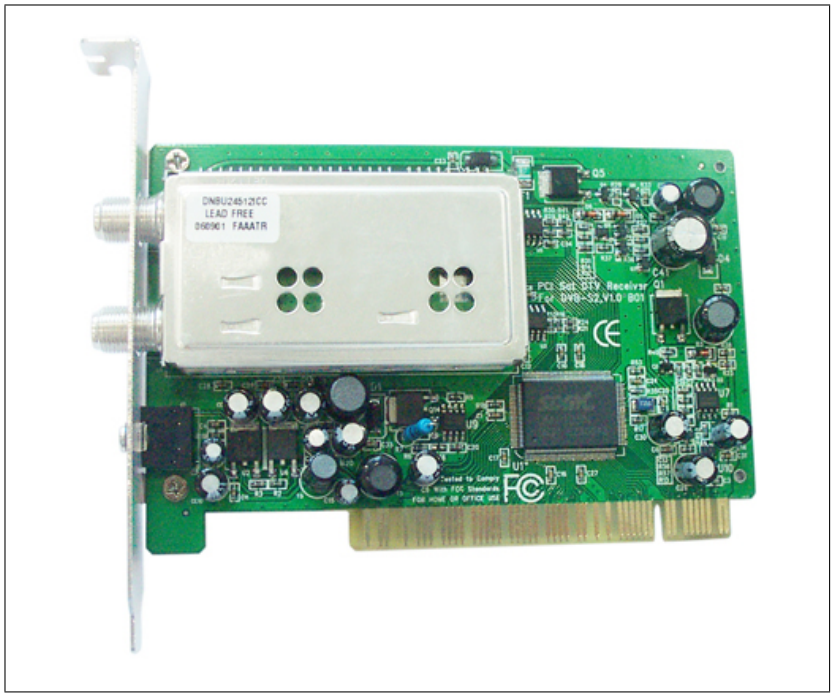

Figure 13.4: DVBWorld DVB-S2 PCI2004 STB for Satellite

DVB-S2 is an improved and updated specification to replace the DVB-S standard, ratified by ETSI in March 2005 Today the main use for this new standard is the distribution of HDTV, while the original standard was mainly applied to SDTV services. The development of DVB-S2 coincided with the introduction of HDTV and H.264 (MPEG-4) video codecs ,yes ,DVBWorldDTV DVB-S2 PCI card fascia give you watching best TV .

- Support DVB-S Protocol (EN 300 744) & Support DVB-S2 Protocol
- Support DVB-Data Protocol (EN 301 192)
- Digital Satellite TV and Radio Program?Receiving
- Support HDTV (MPEG2&MPEG4/H.264) Receiving

[1] which is kindof weird, because then I would have expected the model nunmbers to be reversed

- Real Time Digital Video Recording (DVR) and Scheduling Recording
- Time-Shifting
- Electronic Program Guide (EPG)
- Still Frame Capture
- Multi Free Channel Preview
- Subtitle
- Satellite / Transponder Auto Scan
- IP PID scanning, IP data broadcasting in LAN
- MPEG2 Video broadcasting in LAN, Generate IP data broadcasting task automatically
- IP MPEG4 media playing, IP MPEG4 media recording
- Favorite List
- Full Screen Display
- Multi language Switch
- MPEG-II Software Decoding
- Software Upgradeable
- DiSEqC 1.2 / USALS Support
- IR Remote Controller Available

Chapter 14

GeniaTech

http://www.geniatech.com sectionDVB-S TV Card / Digistar http://www.geniatech.com/pa/digistar.htm

DigiSTAR is a digital satellite receiver card, which allows you to access free-to-air digital satellite TV and digital radio to your PC. It can be used to record and save TV programs directly to your PC's hard disk with MPEG-2 TS format. You can even hook it up to your home video entertainment system with the additional AV and s-video input. It's also packed with a unique feature of allowing you to pause a live broadcast and continue from where you left with the Time-shifting function.

- Watch free-to-air digital satellite TV program and listen to digital radio on PC
  - Fully Resizable TV (up to full screen)
  - Auto channel scan and automatic channel name recognition
- Personal Digital VCR (Personal Video Recorder)
  - Pause, rewind and instant replay live TV program
  - Play back your recorded programs while continuing to record in real time (Time Shift)
  - Record/ Playback Live TV programs and video in MPEG-II quality
  - Recording Scheduler
- Support single and multiple still image capture

Figure 14.1: GeniaTech DVB-S TV Card / Digistar

- Video Always on Top
- Support Windows 2000/XP
- Fully Functional Remote Control
- Support ProgDVB and its plugins

If the structure of this featurelist looks familiar, that's because it does. In fact, the list is exactly the same as the one from the Digiwave DGP-103G.

14.1 DVB-S TV Card / Digistar II

http://www.geniatech.com/pa/digistar2.htm

> DigiSTAR II is a digital satellite receiver card, which allows you to access free-to-air digital satellite TV and digital radio to your PC. It can be used to record and save TV programs directly to your PC's hard disk in MPEG-2 TS format. You can even hook it up to your home video entertainment system with the additional AV and s-video input. It's also packed with a unique feature of allowing you to pause a live broadcast and continue from where you left with the Time-shifting function.

- Watch free-to-air digital satellite TV program and listen to digital radio on PC
  - Fully Resizable TV (up to full screen)

Figure 14.2: GeniaTech DVB-S TV Card / Digistar II

  - Auto channel scan and automatic channel name recognition
- Personal Digital VCR (Personal Video Recorder)
  - Pause, rewind and instant replay live TV program
  - Play back your recorded programs while continuing to record in real time (Time Shift)
  - Record/ Playback Live TV programs and video in MPEG-II quality
  - Recording Scheduler
- Support single and multiple still image capture
- Video Always on Top
- Support Windows 2000/XP
- Fully Functional Remote Control
- Support ProgDVB and its plugins

The description and featurelist of this card are EXACTLY the same as for the previous DigiSTAR. This makes me believe that the previous card is just an older version.

14.2 DVB-S TV Card / TVStar

http://www.geniatech.com/pa/tvstar.htm

Figure 14.3: GeniaTech DVB-S TV Card / TVStar

GeniaTech TVStar is a DVB-S/Analogue TV/FM radio/Internet card, which allows you to access digital satellite TV, Cable TV, Air TV and FM radio on your PC, and uses internet via satellite. TVStar can record your favorite programs, playback and capture whenever you like and further burn them into VCD/DVD. It support Time-Shifting, EPG, teletext, instant and scheduled recording while you are watching DVB-S TV and analogue TV

- Access DVB-S + Analog + FM + Internet function all in one Card
- Support video capture via Video-in
- High-sensitivity silicon tuner for all worldwide TV systems(PAL/SECAM/NTSC)
- Support A2, NICAM, SAP and stereo programs for analogue TV
- TV function: SAP (language optional), Electronic Program Guide (EPG), transponder, region, and frequency range auto scan.
- Support single and multiple still images capture
- Record MPEG2, MPEG4, MP3, MP4, VCD, DVD, SVCD, WMV, WMA.
- Support ProgDVB and its Plugins
- Time-Shifting function
- Full function remote control

Chapter 15

Hauppauge

http://www.hauppauge.com

15.1 WinTV-NOVA-S-Plus

http://www.hauppauge.co.uk/pages/products/data_novasplus.html

Watch, Pause and Record Digital satellite TV on your PC. Sat radio and Sat teletext, too!

- Watch, pause and record digital satellite TV on your PC, in a window or full screen
- Record digital satellite TV to your PC's hard disk using high quality MPEG-2
- Listen to DVB-S satellite radio
- Includes analogue A/V inputs and Hauppauge's SoftPVR, for video recording from VCR or camcorders

Figure 15.1: Hauppauge WinTV-NOVA-S-Plus

- Professional teletext reception
- Ergonomic remote control for easy operation

WinTV-NOVA-S-Plus has these great TV watching features

- Digital satellite TV and radio for your PC in a single slot PCI board. Watch free-to-air satellite TV, in a window (or full screen) on your PC!
- Record digital satellite TV to your PC's hard disk using high quality MPEG-2. Digital TV recordings will typically take 1,5 Gb of disk space per hour.
- Pause digital satellite TV with instant replay.
- Receive Teletext data via satellite TV.
- Listen to digital satellite DVB-S radio.
- DiSEqC 1.0 support.
- Includes WinTV-Scheduler, so you can schedule your TV recordings on a daily, weekly or once only schedule.
- Includes Hauppauge new IR remote control, for easy control of TV watching, record and play functions.

Plus an auxiliary audio/video input

- Video-in-a-window from an analog auxiliary audio/video source such as a VCR or camcorder. S-Video and composite video inputs plus stereo audio too!

- Record analogue video to your PC's hard disk using our SoftPVR. TV recordings will typically take 1 Gb of disk space per hour. Play the video recordings back to your PC screen.

Free-to-air digital satellite TV on your PC screen. And listen to satellite radio, too! WinTV-NOVA-S-Plus brings several hundred high-quality digital satellite TV channels to your PC! Simply plug WinTV-NOVA-S-Plus into your PC, load the Hauppauge software and then connect up a satellite antenna (DiSEqC 1.0* is supported). Youll be watching and recording great quality satellite TV on your PC in no time!

Watch, Pause and Record satellite TV Our WinTV application allows you to watch, pause and record satellite digital TV. Digitally record your TV shows to your PCs hard disk using high-quality MPEG compression and play them back at any time, or pause live TV and create your own instant replay. You can also use Hauppauges WinTV-Scheduler to schedule your TV recordings on a daily, weekly or once only schedule. Note: TV recording takes approx. 1,5 Gbytes of hard disk space per hour.

Professional Teletext with VTPlus Our VTPlus Professional Teletext software displays multiple teletext pages and subpages in a separate window on your PC screen. Teletext scripts automate the retrieving of teletext data.

Listen to satellite DVB-S digital radio The WinTV-NOVA-S-Plus has a digital DVB-S radio receiver, so you can listen to high quality satellite radio channels while you work on your PC.

Watch and record videos from VCRs or camcorders Our SoftPVR makes digital video recordings from your home video tapes. Attach an external video source and watch and record videos to disk in MPEG-1 or MPEG-2 format. Camcorders, VCRs and other analogue video sources can be connected.

Hauppauges remote control makes WinTV-NOVA-S-Plus easy to use Change channel, adjust audio volume, start a recording, all from the Hauppauge remote control!

15.2 WinTV-NOVA-HD-S2

http://www.hauppauge.co.uk/pages/products/data_novahds2.html

Watch and record High Definition Satellite TV on your PC!

- High definition satellite DVB-S2 TV receiver for your PC. DVB-S digital satellite, too!
- Turn your PC into a video recorder for digital satellite TV!

WinTV-NOVA-HD-S2 high definition Satellite TV for your PC! Watch and record free-to-air High Definition satellite TV (DVB-S2) and standard definition satellite TV (DVB-S) on your PC. Recordings are made to your PCs hard disk in the same quality as live TV. Listen and record digital satellite radio* too!

High Definition satellite TV brings the best video quality and CD quality audio to your PC. WinTV-NOVA-HD-S2 can receive free-to-air high definition broadcasts, such as Astras Pro7 HD or SAT1 HD.

Figure 15.2: Hauppauge WinTV-NOVA-HD-S2

Turn your PC into a Digital Video Recorder for satellite TV. Cyberlinks PowerCinema application is included to record standard or high definition digital satellite TV to your PCs hard disk, with time shifting. A TV scheduler is included to automatically record your favourite TV shows on a daily, weekly or once only schedule.

Hauppauge's remote control makes WinTV-NOVA-HD-S2 easy to use. Change channels, adjust audio volume, start recordings, play music, start a slide show, all from the comfort of your living room chair!

15.3 WinTV-CI

http://www.hauppauge.co.uk/pages/products/data_ci.html

Compatble CAM's:

- AlphaCrypt
- Conax
- Irdeto
- Mediaguard
- AstonCrypt
- CryptoWorks
- Viaccess

Figure 15.3: Hauppauge WinTV-CI

Compatible WinTV Products:

- WinTV-HVR-900
- WinTV-HVR-1300
- WinTV-HVR-3000
- WinTV-HVR-4000 (not S2 channels)
- WinTV-NOVA-T-PCI
- WinTV-NOVA-T-USB2
- WinTV-NOVA-SE2
- WinTV-NOVA-S-Plus

15.4 WinTV-HVR-3000

http://www.hauppauge.co.uk/pages/products/data_hvr3000.html

All in one Tri-mode TV tuner: DVB-S digital Satellite, DVB-T digital Terrestrial, Analogue cable Television, Radio and Teletext on your PC!

- Tri-mode TV receiver for your PC! Watch and record digital satellite, Freeview digital and analogue cable TV on your PC.
- Listen to FM radio, digital DVB-T or DVB-S radio.

Figure 15.4: Hauppauge WinTV-HVR-3000

- Schedule your TV recordings using high quality MPEG-2. Also includes free 7-day EPG for Freeview DVB-T.
- Includes analogue A/V inputs and SoftPVR, for video recording from VCR or camcorders.
- With ergonomic remote control.

WinTV-HVR-3000 features

- Triple mode free-to-air TV receiver: Digital satellite DVB-S, Digital terrestrial DVB-T Freeview, Analog PAL cable or TV aerial TV
- Record Digital TV and digital radio in high quality MPEG.
- Record Analogue cable TV or your personal videos (using the A/V inputs) in MPEG-1 or MPEG-2 formats.
- Pause Digital or Analogue TV, with instant replay.
- Listen to DVB-T, DVB-S and FM radio too!
- Schedule your TV recordings with WinTV-Scheduler. Also included is the Hauppauge 7-day Electronic Program Guide for DVB-T!
- Includes Hauppauge IR remote control for easy operation.

Triple mode TV receiver for your PC WinTV-HVR-3000 has three different TV receive modes; analog PAL TV, digital DVB-T and digital DVB-S. Watch analog cable TV, digital Freeview AND digital satellite TV, all on your PC screen!

Digital Television is the TV of the future providing sharper TV pictures and near CD quality audio. But if you can't currently receive digital TV, the WinTV-HVR-3000 can still be used to watch and record cable TV or from a TV aerial. But you can add DVB-T or DVB-S digital TV reception at any time. Best of all, when receiving both digital and analogue TV, our WinTV2000 application allows you to switch between analogue and digital channels seamlessly. Plus pause digital TV with instant replay, too!

Free-to-air DVB-S digital satellite TV & radio on your PC! Bring hundreds of high-quality digital satellite TV channels to your PC (DiSEqC 1.0* is supported)! Watch and record satellite TV from different countries.

Freeview DVB-T digital terrestrial TV & radio on your PC! Watch more than 50 Freeview digital terrestrial TV broadcasts and digital terrestrial radio on your PC, with a simple rooftop aerial*.

Analogue TV over cable TV (or terrestrial antenna too!) Connect WinTV-HVR-3000 to your cable TV network and watch TV and FM radio with great stereo audio. Record your TV shows in MPEG-1-VCD, MPEG-2-SVCD or MPEG-2-DVD formats using our SoftPVR. You can also receive analogue teletext on your PC screen!

Digital Video Recorder: Record Analogue, DVB-T or DVB-S TV in high quality MPEG! Schedule your digital TV recordings with our WinTV-Scheduler. For DVB-T users, record TV programs daily or weekly via our free 7 day DVB-T Electronic Program Guide.

Watch and record videos from your VCR or camcorder Attach your external video source to the audio and video inputs to watch analogue video on your PC. Record your personal video to your hard disk in MPEG-1-VCD, MPEG-2-SVCD or MPEG-2-DVD.

WinTV-HVR-3000 recordings are compatible with Hauppauge's MediaMVP. Record TV shows on your PC and watch them on your living room TV set with MediaMVP.

Hauppauge's remote control makes the WinTV-HVR-3000 easy to use - change channels, adjust audio volume, start recordings, all from the Hauppauge ergonomic remote control!

15.5 WinTV-HVR-4000

http://www.hauppauge.co.uk/pages/products/data_hvr4000.html

WinTV-HVR-4000 features

- Quad-mode TV tuner for your PC. Watch and record:
  - DVB-S2 hi-definition digital Satellite TV
  - DVB-S digital Satellite TV
  - Freeview digital Terrestrial TV
  - Analogue TV
- CyberLink PowerCinema application included for watching full screen TV or TV-in-a-window on your PC.
- Schedule your TV recordings on a daily, weekly or once only schedule. Free EPG for analogue and digital TV too!

Figure 15.5: Hauppauge WinTV-HVR-4000

- Includes Hauppauge remote control.

Hi-Definition DVB-S2 features:

- Satellite DVB-S2 TV receiver, for free-to-air hi-definition programmes.
- Record DVB-S2 programmes to disk in the original hi-definition H.264 format.
- DiSEqC 1.0 supported

Freeview DVB-T features:

- Freeview terrestrial DVB-T receiver
- Record Freeview programmes to disk in the original high quality MPEG-2 format.
- Supports teletext and DVB radio.

Satellite DVB-S features:

- Free-to-air digital satellite receiver.
- Record DVB-S prgrammes to disk in the original high quality MPEG-2 format.
- DiSEqC 1.0 supported.

Analogue TV features:

- Record and pause analogue TV to disk using "Good, Better or Best" MPEG-2 compression. Teletext and Nicam stereo audio for analogue TV, too.
- Listen to FM radio with the built-in FM radio receiver.
- Auxiliary audio/video input for analogue video sources such as camcorders or VCRs.

WinTV-HVR-4000: the best quad-mode TV receiver for your PC! WinTV-HVR-4000 is a four-in-one TV tuner which can receive four different television formats: analogue TV, Freeview digital terrestrial DVB-T, digital satellite DVB-S and High Definition digital DVB-S2. Watch and record analogue TV, digital Freeview and High Definition digital satellite TV, all from one PCI board!

Digital TV now comes in High Definition. High Definition DVB-S2 satellite TV brings the ultimate TV experience to the PC screen. HD gives you the best quality video and CD quality audio. Record movies in the full HD H.264 format to your PCs hard disk! But if you cannot currently receive high definition digital satellite TV, the WinTV-HVR-4000 can still be used to watch and record analogue TV, Freeview or standard free-to-air digital satellite TV.

Freeview DVB-T digital terrestrial TV & radio on your PC! Watch more than 50 Freeview digital terrestrial TV broadcasts and digital terrestrial radio on your PC, with a simple rooftop aerial*. WinTV-HVR 4000 will also support High Definition DVB-T channels (when available).

Analogue TV on your PC screen. Watch and record analogue TV programmes to disk. Record your TV shows (or your home videos) using "Good, Better or Best" MPEG-2 compression. Schedule FM radio recordings in WMA 32, 64 or 128 K/bits! You can also receive analogue teletext.

Digital Video Recorder: Record analogue, DVB-T or DVB-S TV in high quality MPEG-2, or high definition digital TV in H.264! Use CyberLink PowerCinema's TV scheduler to automatically record your favourites TV shows, on a daily, weekly or once only schedule. Or use the free Electronic Program Guide for digital TV to have an overview of all up coming programmes!

Hauppauge's remote control makes the WinTV-HVR-4000 easy to use Control all the functions of CyberLink PowerCinema with our ergonomic remote control. Change channels, adjust audio volume, start recordings, play music, start a slide show, all from the comfort of your living room couch!

Chapter 16

KNC1

http://www.knc1.com

16.1 TV-Station DVB-S

http://www.knc1.com/gb/produkte/digital_dvb_s.htm

This is the right card for you to take advantage of the seemingly endless TV and radio programming available today, courtesy of satellite technology. Receive, record, edit, and burn several hundred TV and radio channels to CD or DVD. You can even gain access to the Internet using this card!

In an effort to satisfy every need, including the reception of Pay-TV*, this card even has a standardised CI Common Interface, which supports our CineView Module, like all of our future digital TV cards.

TV and Radio Watch TV like you have never done it before, with the clarity, detail, and quality of HDTV (MPEG2 standard) the future of TV. Never again miss a highlight on your favourite show even when you are sitting at your computer. While surfing the Internet, you can watch the current TV programming in a small window in the corner of your monitor, or you can sit back and relax and watch more suspenseful scenes using the full screen mode.

Figure 16.1: KNC1 TV-Station DVB-S

Recording Recording your favourite radio and TV programming is equally comfortable. Start recording manually or use the recording timer to schedule a recording ahead of time. TV programming can be recorded by simply clicking on a programming item in the Teletext display (radio programming can only be recorded manually). Edit the recorded material and burn it to CD or DVD using video editing software to enjoy it for many years to come.

Internet If you live in a rural region or an area that does not offer DSL, or if you live in a city but do not wish to buy any additional hardware, you can use this product (and a separate service provider) for high-speed Internet Access**. Simply find a service provider or select one from the list of providers and sign up for a service, or start surfing the Internet immediately using call by call.

Features

- Recording and editing of digital radio and TV programmes using various formats in DVD quality
- PCI audio streaming (audio is carried using the PCI slot, which eliminates the need for the analogue audio loop back cable)
- High-speed Internet access using DVB-S

- Time shifting
- EPG (Electronic Program Guide) using the signal carried with the TV program and not the Internet
- Teletext
- HDTV (MPEG2 standard)

16.2 TV-Station DVB-S Plus

http://www.knc1.com/gb/produkte/digital_dvb_s_plus.htm

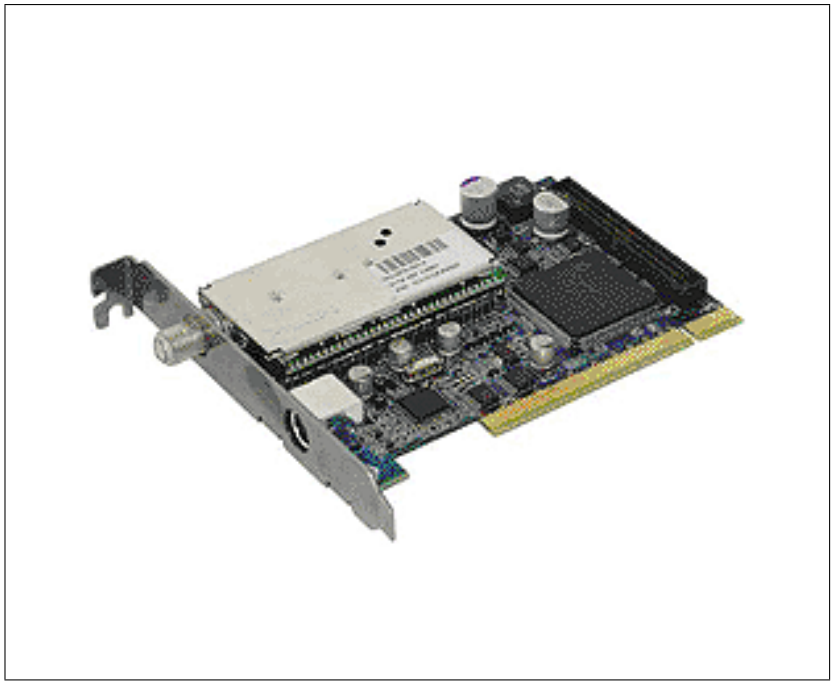

Figure 16.2: KNC1 TV-Station DVB-S Plus

Digital Satellite TV Card plus analogue Video-In This is the right card for you to take advantage of the seemingly endless TV and radio programming available today, courtesy of satellite technology. Receive, record, edit, and burn several hundred TV and radio channels to CD or DVD. You can even gain access to the Internet using this card! The Plus version of this card has additional analog inputs, which allow you to connect your analogue equipment and digitise your VHS videos and home movies and preserve them for a long time to come. In an effort to satisfy every need, including the reception of Pay-TV*, this card even has a standardised CI Common Interface, which supports our CineView Module, like all of our future digital TV cards.

TV and Radio Watch TV like you have never done it before, with the clarity, detail, and quality of HDTV (MPEG2 standard) the future of TV. Never again miss a highlight on your favourite show even when you are sitting at your computer. While surfing the Internet, you can watch the current TV programming in a small window in the corner of your monitor,

or you can sit back and relax and watch more suspenseful scenes using the full screen mode. The radio tuner works in a similar fashion, but there is not even the need to keep a window open. Simply tune to your favourite radio station and minimize the window to be able to enjoy the radio programming coming from your PC speakers in the highest quality.

Recording Recording your favourite radio and TV programming is equally comfortable. Start recording manually or use the recording timer to schedule a recording ahead of time. TV programming can be recorded by simply clicking on a programming item in the Teletext display (radio programming can only be recorded manually). Connect your camcorder or VCR to the TV Card and transfer your favourite videos to CD or DVD to enjoy them for many years to come.

Internet If you live in a rural region or an area that does not offer DSL, or if you live in a city but do not wish to buy any additional hardware, you can use this product (and a separate service provider) for high-speed Internet Access**. Simply find a service provider or select one from the list of providers and sign up for a service, or start surfing the Internet immediately using call by call.

Features:

- Reception and recording of digital satellite radio and programmes
- Recording and editing of digital radio and TV programmes using various formats in DVD quality
- PCI audio streaming (audio is carried using the PCI slot, which eliminates the need for the analogue audio loop back cable)
- High-speed Internet access using DVB-S
- Time shifting
- EPG (Electronic Program Guide) using the signal carried with the TV program and not the Internet
- Teletext
- CD / DVD Creator
- HDTV (MPEG2 standard)

16.3 CineView CI-Module

http://www.knc1.com/gb/produkte/zubehoer.htm

The CI-Module was developed to complement DVB receiver cards with an 80-pin expansion header. It accommodates a Common-Access-Module (CAM), which houses a Pay-TV providers key card used to decrypt encrypted Pay-TV channels. The CI-Module supports 3.3 Volt as well as 5 Volt CAMs and the proper power supply voltage is selected automatically.

The CI-Module can either be installed using an open 3.5 drive bay or an unused interface card break-out slot in the back of your computers case.

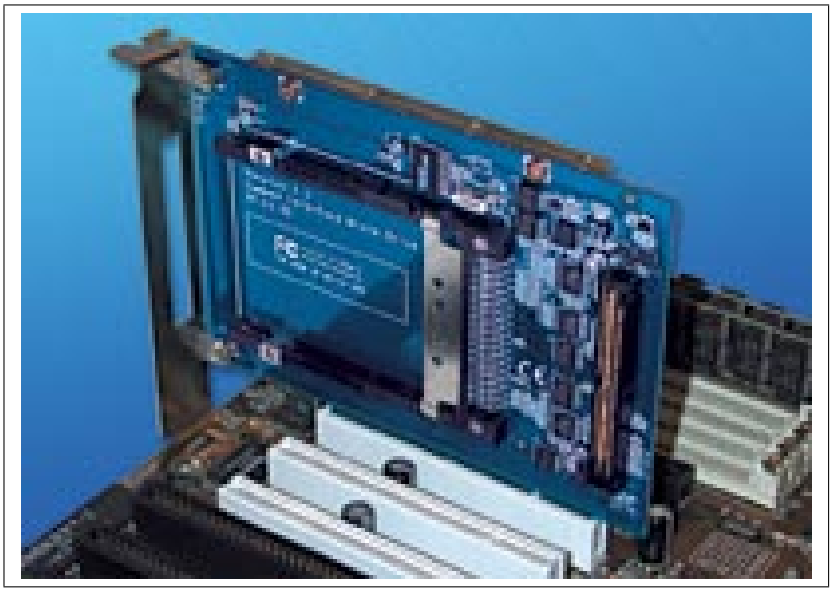

Figure 16.3: KNC1 CineView CI-Module

The installation is easy: Always turn your computer off and disconnect the power cord before opening your computer case!

Connect the CI-Module to your DVB card using the ribbon cable that is supplied with the CI-Module. Insert the CAM into the CI-Module and turn your computer back on. Initialize the CAM module using the software that came with your DVB card and you are ready to enjoy Pay-TV programming in addition to the available free programming!

The software that came with your TV-Station allows you to block individual Pay-TV channels using parental controls (third party software may vary).

Compatible CAMs:

- AlphaCrypt
- AlphaCrypt light
- AlphaCrypt TC
- inXWorld
- CryptoWorks
- Conax

Chapter 17

KWorld

http://www.kworld.com.tw

17.1 PlusTV SAT PCI

http://www.kworld.com.tw/product_overview.aspx?P_ID=30

Features:

- Receives free digital satellite TV program and radio (not DAB) on PC
- Receives free-to-air digital satellite TV program on PC
- Includes HyperMedia2.0 Satellite application : User-Friendly interface with powerful functions
  - Displays enhanced 16:9 Wide-Format Display
  - Performs auto channel scan and name recognition
  - Previews multiple channel
  - TV/Video always on the top of the monitor screen
  - TV/Video wallpaper
  - On-Line Help

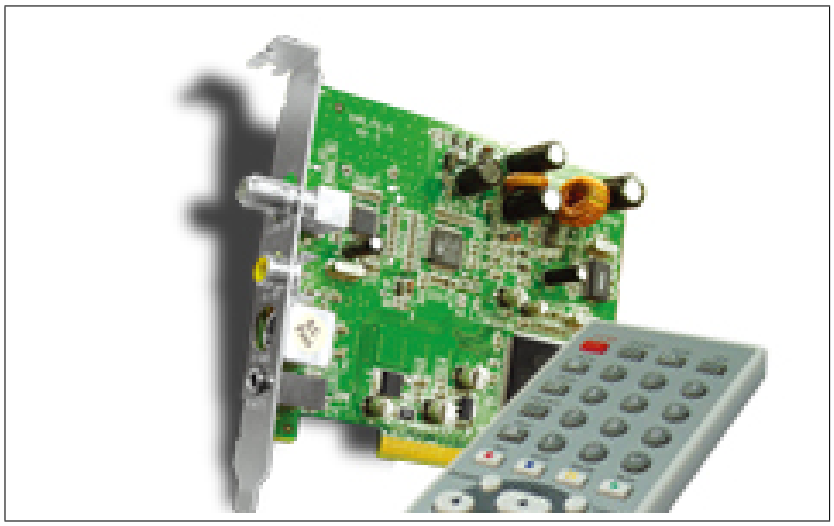

Figure 17.1: KWorld PlusTV SAT PCI

- Supports EPG Function (DVB Standard)
- Supports Time-Shifting and Scheduled-Recording function
- Supports real-time video recording in MPEG-4/2/1 format for analog (MPEG4 is compatible with DivX or Microsoft MPEG4). (Note: The codec program would need to be downloaded from internet)
- Supports Still Image capture in BMP format
- Adds additional Composite/S-Video input for connecting other video sources such as DVD Player/ VCD/ VHS/ camcorder.
- Scheduled Recording in PC Power-Off Mode (SRPO)
- Powers-Off PC by remote control

17.2 PlusTV DVB-S / Analog PCI

http://www.kworld.com.tw/product_overview.aspx?P_ID=40

Features:

- Integrated Video and Audio Decoder (such as BTSC, EIAJ, NICAM, A2 & AM etc) chipset
- Watches free-to-air digital satellite (DVB-S) and analog TV on your desktop computer
- Supports PAL/NTSC/SECAM Analog TV systems from cable/air TV signal
- Supports FM Radio
- Additional AV/S-Video Input for connecting other video sources (such as DVD Player/VCD/VHS/Camcorder)
- With powerful KWorld HyperMedia software
  - Receives (or records) Satellite TV (DVB-S) /or analog TV
  - Performs auto channel scan and name recognition

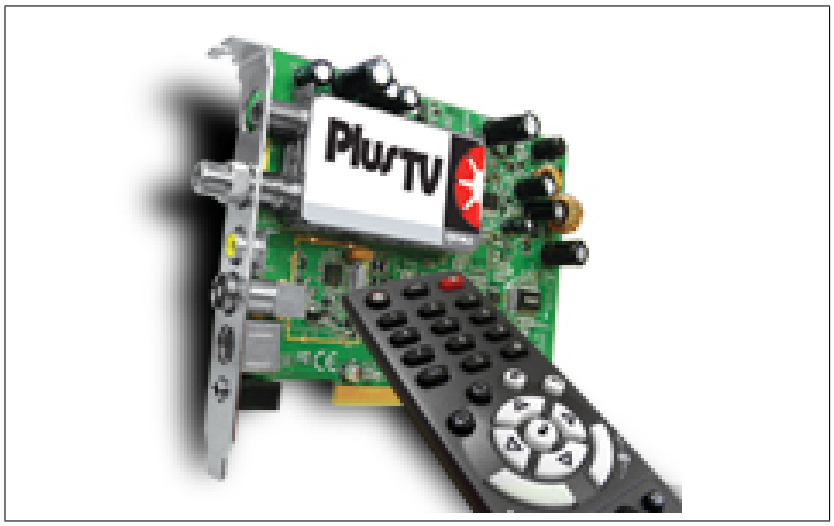

Figure 17.2: KWorld PlusTV DVB-S / Analog PCI

  - Previews multiple channel preview
  - Enables enhanced 16:9 wide-format display
  - Always displays TV/Video on the top of the monitor screen
  - Adjusts Brightness/Contrast/Saturation/Hue
  - Supports Time-Shifting and Scheduled-Recording
  - Supports Still Image Capture in BMP format
  - Supports Picture-In-Picture (PIP)
  - Supports Sleeping Timer
  - Supports Real-Time Video Recording in MPEG 4/2/1 format for analog TV (MPEG4 is compatible with DivX or Microsoft MPEG4) (Notes: you have to download the MPEG codec by yourself.)
  - Supports Real-Time Satellite TV (DVB-S) Recording in Transport Stream (TS) or Program Stream (PS) format
  - When playback TS, it allows you to watch any program of the TS
  - Supports EPG & Teletext Functions (DVB Standard).
- Scheduled-Recording in PC Power-Off Mode (S.R.P.O.)
- Power-off PC by a full functional infrared remote control

Chapter 18

LifeView

http://www.lifeview.com/usa

18.1 LifeTV SATellite

http://www.lifeview.com/usa/html/products/PCITV/lifetv_satellite.htm

Upgrade your TV viewing experience with the unprecedented quality of digital TV! LifeTV SATellite is a low-profile DVB-S TV card that can receive digital satellite TV and radio programs. Enjoy the increased resolution, reception, and quality of digital TV, complete with stereo sound!

It also includes inputs for S-Video and composite video sources watch and record video from a VCR or camcorder! And with LifeView's exclusive MST technology, you can watch both digital TV and analog video at the same time, on the same screen! Watch the two video streams picture in picture, side by side, or in separate windows!

Figure 18.1: LifeView LifeTV SATellite

Record digital TV perfectly to MPEG-2, or record analog video to MPEG 1/2/4. TimeShifting functions let you pause, rewind, and fast forward live TV! You can schedule recordings, auto scan for channels, take still image snapshots and more! The LifeTV SATellite is the perfect way to experience the future of television today!

Digital satellite TV and radio reception (DVB-S) Experience the future of television with free-to-air DVB-S digital TV reception! Offering increased resolution for a static-free sharper image and stereo sound, digital TV brings home theater quality video to your PC!

C/Ku-Band receivable With extensive satellite listings updated regularly, you can be sure to find digital TV programming in your area! Auto scan satellites for channels, or manually enter your settings!

Reception of DVB Date services (max Download speed up to 10Mbit/s) Why buy expensive equipment for satellite internet service when you can receive both satellite TV and internet from the same card perfect for families who live outside the range of traditional television and broadband internet access areas! *(requires satellite ISP service contact your provider for details)

S-Video and composite video inputs Connect a VCR, camcorder, game console or any external analog video source with the included S-Video and composite video inputs! Use it to monitor video from the device, or record video to your hard drive perfect for archiving home movies to digital format!

EPG, Teletext, and Closed Captioning functionality Expand your viewing experience with EPG functionality, Teletext programming and Closed Captioning reception from select TV broadcasts!

FM radio reception (only FM model) Listen to FM radio on your PC, and record broadcasts to your hard disk!

Remote control Comfortably change channels from a distance with the included IR remote control and IR sensor cable.

Video Capture Record the exact digital TV stream to MPEG-2, record analog video to MPEG 1/2/4 Save your favorite digital TV programs perfectly - the broadcast MPEG-2 stream can be saved directly to the hard drive! Record analog video to MPEG 1/2/4 formats save your favorite shows to your hard drive and watch them anytime!

Still-image snapshots Save a video snapshot to your hard drive to send to friends, or set it as your desktop wallpaper!

TimeShifting features to pause, rewind, and fast forward live TV Take control of your TV viewing experience! Take a break, pause TV, and pick up where you left off! Rewind to replay a scene, or fast forward past commercials!

Scheduled recordings Record your favorite programs when you away easily schedule a one time recording or a daily recording for your favorite TV series

Chapter 19

MSI

http://global.msi.com.tw

19.1 TV@nywhere Satellite

http://global.msi.com.tw/index.php?func=proddesc&prod_no=1031&maincat_no=132&cat2_no=260

Features

- Digital TV & Radio receiving(DVB-S)
  - Watch free-to-air digital Satellite TV programs
- Listing to digital stereo radio
  - High Definition & Crystal Clear Video Quality

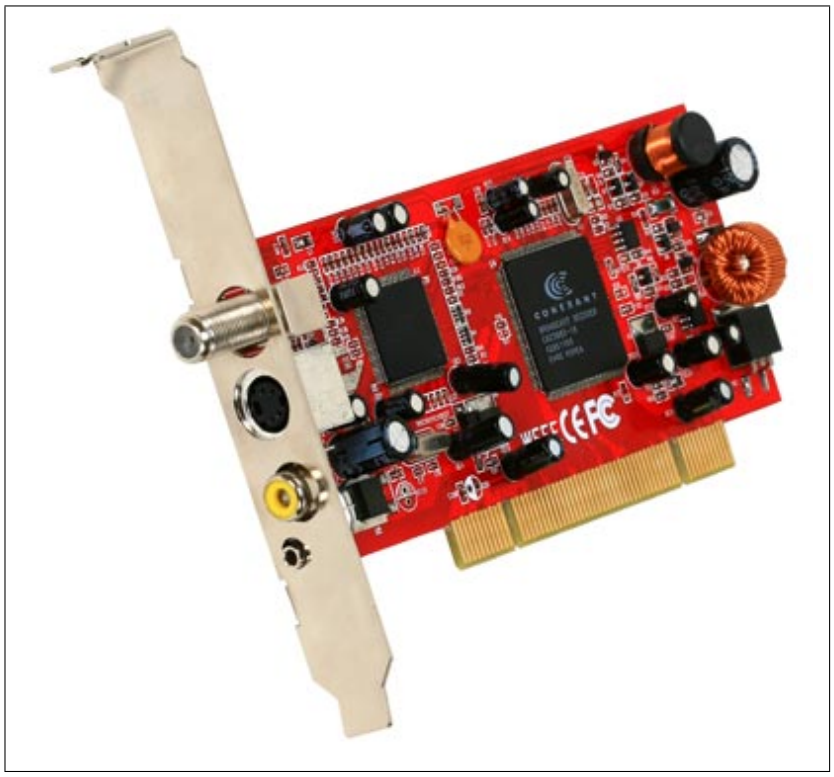

Figure 19.1: MSI TV@anywhere Satellite

  - Support HDTV receiving
  - 4:3 & 16:9 selectable aspect radio
- High speed Internet via satellite
  - DVB data service
  - High download speed via satellite bandwidth
- Personal Vidio Recording
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Direct Burn to DVD format and Time-Shifting
- Wake Up Scheduled Recording
- Just set your recording schedule in advance, the computer will execute the recoding job automatically even your PC is in sleep mode!
- TV Function
  - SAP (Language option)
  - Electronic Program Guide(EPG)
  - Transponder, region, and Frequency range Auto Scan
  - Multiple Frame Capture
  - Multi Channel Preview

  - Favorite List

- Compatible with Microsoft MCE
- Additional AV/S-Video input for connecting other video sources such as DVD Player/VCD/VHS/camcorder

Chapter 20

Newmi Digital Tech

http://www.newmi.com

20.1 (DM713S) DVB-S Card

http://www.newmi.com/en/productsshow.asp?id=491

DM713S DVB-S TV CARD support IP data decoding and MPEG-2 A/V decoding. DVB-S can be widely used in software download, fast accessing internet, distance education, distance treatment, distance shopping, newspaper transmission system, video conference, and VOD, etc. DVB-S is based on an open system, supporting upgrade from a local disc or Internet.

- Fully compatible with DVB-DATA ETSI/EN 301 192 standard
- Fully compatible with DVB-S Protocol (EN 300 744) /MPEG-2
- Compatible with TCP/IP, UDP
- Support SDTV/HDTV
- Input frequency: 950 MHz 2150 MHz

Figure 20.1: Newmi DM713S DVB-s Card

- Symbol rate: 2 45 MS/s
- High-speed data download with FTP,HTTP and SMTP
- Support IP Unicast and Multicast
- Support DiSEqC1.0/1.2 protocol
- Up to 32 PIDs simultaneous filtering
- Support Electronic Program Guide (EPG)
- Support Real Time Digital Video Recording (DVR)
- Support Infrared Remote Control

20.2 (DM714S) DVB-S Card

http://www.newmi.com/en/productsshow.asp?id=492

DM714S DVB-S TV card supports IP data decoding and MPEG-2 A/V decoding. DVB-S can be widely used in software download, fast accessing internet, distance education, distance treatment, distance shopping, newspaper transmission system, video conference, and VOD, etc. DVB-S is based on an open system, supporting upgrade from a local disc or Internet.

- Silicon tuner
- Fully compatible with DVB-DATA ETSI/EN 301 192 standard

Figure 20.2: Newmi DM714S DVB-s Card

- Fully compatible with DVB-S Protocol (EN 300 744) /MPEG-2
- Compatible with TCP/IP, UDP
- Support SDTV/HDTV
- Input frequency: 950 MHz 2150 MHz
- Symbol rate: 2 45 MS/s
- High-speed data download with FTP,HTTP and SMTP
- Support IP Unicast and Multicast
- Support DiSEqC1.0/1.2 protocol
- Up to 32 PIDs simultaneous filtering
- Support Electronic Program Guide (EPG)
- Support Real Time Digital Video Recording (DVR)
- Support Infrared Remote Control

The only difference with the Newmi DM713S card is that this one has a Silicon tuner.

Chapter 21

Pentamedia

http://www.pentamedia.com

21.1 Pent@Value

http://www.pentamedia.com/eng/product/receiver.php

Pent@VALUE is fully DVB-S compliant cost effective PCI satellite receiver card and provide up to 60Mbps IP filtering performance. Pent@Value can enable high performance DVB IP handling application such as DVB IP router, high speed file deliver and high speed satellite internet.

- Tuner
  - Input : F-type 75 Ohm
  - Input frequency 950 2150 MHz
  - Input level -65 -25 dBm
- QPSK and FEC

Figure 21.1: Pentamedia Pent@Value

  - Symbol rate : 2 45 Msps (It may differ according Viterbi Rate)
  - QPSK filter : Root-raised cosine filter with roll-off 0.35 and 0.25
  - Viterbi decoding 1/2, 2/3. 3/4, 5/6, 7/8 and Auto
  - ReedSolomon decoding 204, 188, T=8
  - Deinterleaving : Interleaving depth = 12
- LNB Control
  - LNB supply voltage 13 or 18 V
  - DISEqC 1.0
  - Antenna and LNB control 22 KHz tone
  - Max. LNB supply current 400 mA with short circuit and surge protection
- PCI Interface
  - PIC bus PCI 2.1 compliant
  - Host bus burst rate 132 MB/s
  - Host bus width 32 bit
  - BUS Master DMA : Up to 60 Mbps between PCI card to Host Memory
- Demultiplexing
  - Max. no. section filtering 32 PIDs
  - Engine : Software transport Demuliplexing
  - Descrambler : Software DVB descrambler
  - Streams capture : PES and TS
  - Date rate : Up to 60 Mbps
- Status Monitoring
  - Real time data transfer rate
  - Antenna signal strength
  - Signal lock status
  - Display current channel name

- S/W and H/W capabilities
  - Easy to install
  - Interrupt share avoid H/W interrupt conflicts with other H/W devices
  - UDP/TCP/IP protocol
  - Support TIS Protocol
  - Support UDLR Protocol
  - Multiprotocol Encapsulation (MPE)
  - Unicast and multicast MAC filtering
  - Full EN 301.192 compliant
  - High performance date transfer using bus master DMA mode
  - Provide API for custom application of bulk order
- Security
  - Cyphercast
- Environment
  - Operating temperature 0 to 50 'C
  - Storage temperature -55 to 85
  - Humidity (Operating) 0% to 90%
- Board Size
  - 140 x 95 mm
- Operating System
  - Windows 98,Me Now
  - Windows 2000 Now
  - Windows XP Now
  - Linux Now

Chapter 22

Pinnacle

http://www.pinnaclesys.com(selectUK)

22.1 PCTV Sat Pro PCI

http://www.pinnaclesys.com/PublicSite/uk/Products/Consumer%2BProducts/PCTV%2BTuners/PCTV%2BDigital%2BPVR%2B(DVB-S_DVB-T)/PCTV%2BSat%2BPro%2BPCI.htm

PCTV Sat Pro PCI is a high-quality, affordable digital satellite receiver for Windows PCs. Used in combination with the included, all-new Pinnacle MediaCenter 4.0 software, it delivers the ultimate Digital TV and PVR experience on your PC for watching, recording and TimeShifting satellite TV and radio.

- Enjoy satellite TV and radio (DVB-S) on your PC
- Watch TV in full screen mode or in a moveable, scaleable window on your PC
- Control live TV programmes with TimeShifting
- Record TV programmes directly to hard disk in the original MPEG-2 format or in the space-saving DivX format.
- Record directly to DVD discs

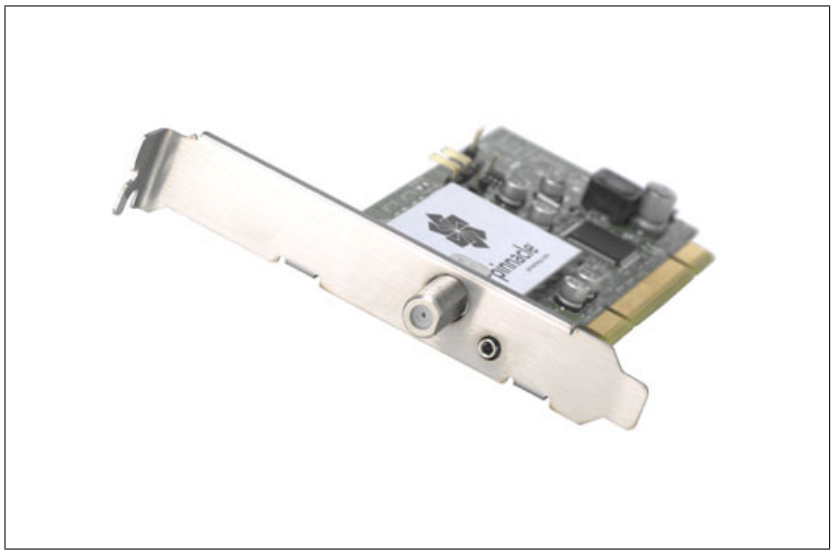

Figure 22.1: Pinnacle PCTV Sat Pro PCI

- Record directly in PlayStation Portable (PSP) or iPod Video compatible MPEG-4 format to take your favourite TV shows with you.
- AutoPowerON before scheduled recordings
- AutoPowerOFF after finished recordings
- Use the integrated Electronic Program Guide (EPG) to schedule one-time or recurring recordings
- Enjoy TV with Dolby Digital sound[1] on your PC
- Get ultra-fast Teletext with unlimited page caching
- Use IP data services such as Internet via Sat or Video On Demand
- Remove commercials and create your own DVDs with the included Pinnacle Studio Quick-Start video editing application
- Access thousands of Internet radio stations with customisable channel lists[2].

22.2 PCTV Dual Sat Pro PCI

http://www.pinnaclesys.com/PublicSite/uk/Products/Consumer%2BProducts/PCTV%2BTuners/PCTV%2BDigital%2BPVR%2B(DVB-S_DVB-T)/PCTV%2BDual%2BSat%2BPro%2BPCI.htm

PCTV Dual Sat Pro features two high-quality digital satellite tuners on one PCI board. Used in combination with the included, all-new Pinnacle MediaCenter 4.0 software, it delivers a more versatile satellite TV and PVR experience. You can enjoy Picture-In-Picture (PiP) viewing on your PC. You can also watch, record and TimeShift two TV programmes at the same time.

[1] Requires Dolby Digital satellite broadcasts
[2] internet connection required

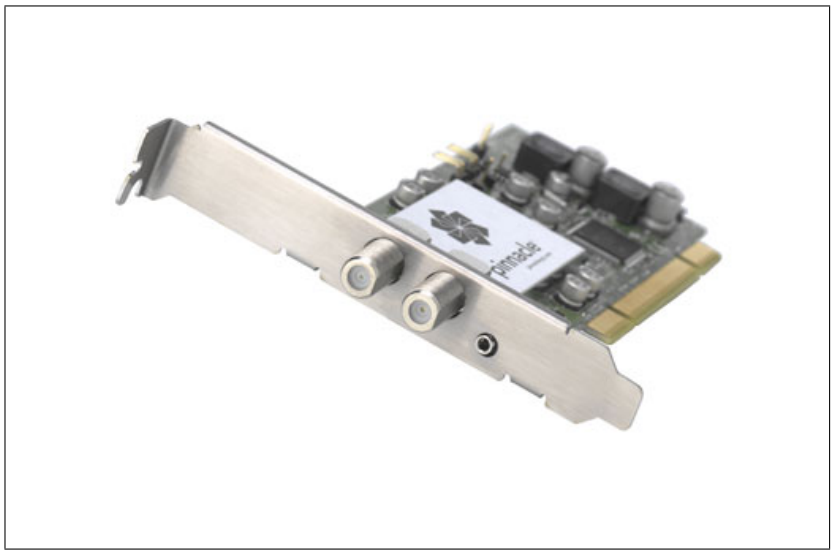

Figure 22.2: Pinnacle PCTV Dual Sat Pro PCI

- Enjoy two satellite TV or radio (DVB-S) programmes simultaneously on your PC
- On your PC, watch one TV show in full screen mode and the other as Picture-In-Pictureor watch two TV shows in moveable, scaleable windows
- Gain full control over two TV programmes with the unique DualTimeShifting feature.
- Record TV programmes directly to hard disk in the original MPEG-2 format or in the space-saving DivX format.
- Record directly in PlayStation Portable (PSP) or iPod Video compatible MPEG-4 format to take your favourite TV shows with you.
- AutoPowerON before scheduled recordings
- AutoPowerOFF after finished recordings
- Use the integrated Electronic Program Guide (EPG) to schedule one-time or recurring recordings
- Enjoy TV with Dolby Digital sound[3] on your PC
- Get ultra-fast Teletext from two channels in parallel and select your favourite Teletext channel while watching another channel
- Use IP data services such as Internet via Sat or Video On Demand
- Remove commercials and create your own DVDs with the included Pinnacle Studio QuickStart video editing application
- Access thousands of Internet radio stations with customisable channel lists.[4]

[3]Requires Dolby Digital satellite broadcasts
[4]Internet connection required

Chapter 23

ProLink

http://www.prolink.com.tw

23.1 PixelView PlayTV 700 DVB-S

http://www.prolink.com.tw/style/content/CN-08-2cp2/product_detail.asp?lang=2&customer_id=1470&name_id=36169&rid=17006&id=75353

> "PlayTV 700 DVB-S" watches free- to-air digital satellite TV program and radio on your PC. It is easier to get high quality programs and audio through satellite. Otherwise, you can use Digital Video Recording function to save your favorite TV programs to hard disk in MPGE-II format and never worry missing any live TV show. We considerately provide full-function infrared remote control. Time-shifting let you easy to pause, fast-ward and play while you are watching TV. Get one and stay in the fancy world.

- Tuner
  - Input/output terminal: F-type 75 Ohm

Figure 23.1: ProLink PixelView PlayTV 700 DVB-S

  - Receiving frequency: 950 2150 MHz tuning range
  - Input level: -65 -25dBm
  - Support standard PC and low profile PC
- QPSK & FEC
  - Symbol rate: 2 45Msps
  - QPSK filter: Root-raised cosine filter with roll-off 0.35
  - FEC: 1/2,2/3,3/4,5/6,7/8 and Auto
- LNB & Switch control
  - LNB supply voltage: 13V/18V
  - DiSEqC: 1.2
  - Support Data Burst & Tone Burst
  - Antenna and LNB control: 22KHz Tone
  - Max. LNB supply current: 400mA with short circuit and surge protection
- De-multiplexing
  - Max No. Section filtering: 32PIDs
  - Engine: software
  - Stream capture: PES & TS
- A/V Format
  - Video format: MPEG-II Main Profile & Main Level
  - Audio format: MPEG-II Audio layer I & II

I can't find any manual on the website.

Chapter 24

Satelco

http://www.satelco.de All the information on the website of Satelco is in German and since I don't know German that well, I can't translate it. But glancing at the featurelist on the website, I don't see any useful information standing out anyway.

24.1 SATELCO EasyWatch HDTV PCI (DVB-S2) - Satellit

http://www.satelco.de/htm/shop/easywatch_hdtv/details.php?s=Produktinfo

24.2 SATELCO EasyWatch PCI (DVB-S) - Satellit

http://www.satelco.de/htm/shop/easywatch_pci/detail_dvb_s.php?s=Produktinfo

Figure 24.1: Satelco EasyWatch HDTV PCI (DVB-S2)

24.3 SATELCO EasyWatch PCI light (DVB-S) - Satellit

http://www.satelco.de/htm/shop/easywatch_pci/detail_light_dvb_s.php?s=Produktinfo

24.4 SATELCO EasyWatch Common Interface

http://www.satelco.de/htm/shop/easywatch_pci/details_easywatch_ci.php?s=Produktinfo

24.5 SATELCO Highend PCI (DVB-S) - Satellit

http://www.satelco.de/htm/shop/popup/highend_pci.htm

Figure 24.2: Satelco EasyWatch PCI (DVB-S)

Figure 24.3: Satelco EasyWatch PCI light (DVB-S)

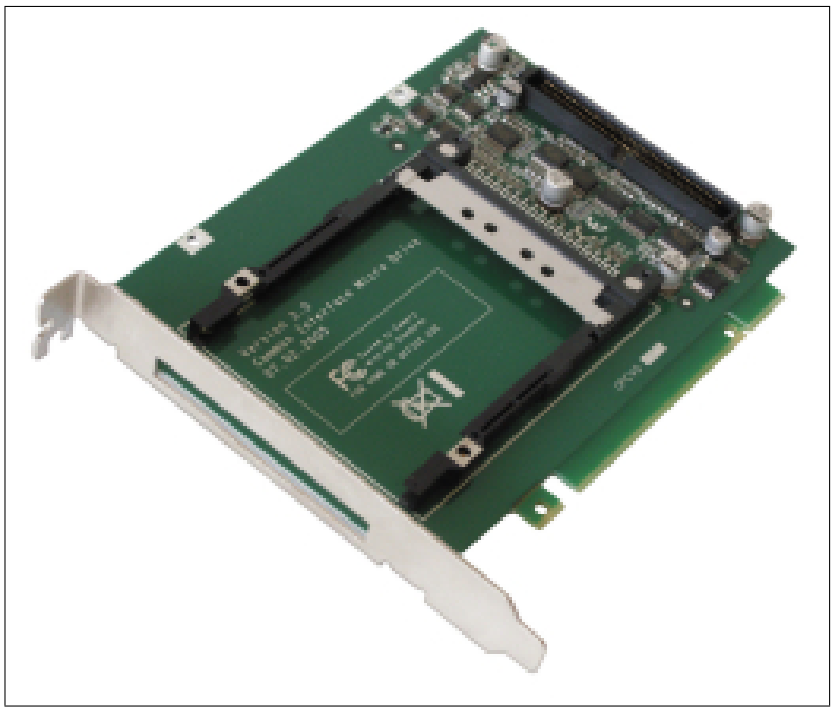

Figure 24.4: Satelco EasyWatch Common Interface

Figure 24.5: Satelco Highend PCI (DVB-S)

Chapter 25

TBS

http://www.tbsdtv.com

25.1 PCI DVB-s Card

http://www.tbsdtv.com/english/product/PCIDVB.html

Functions:

- Digital TV & Radio receiving:
  - Watch digital satellite TV programs on your PCs
  - Listen to digital stereo radio
  - Support DiSEqC 1.2 & USALS
- High Definition & Crystal Clear Video Quality:
  - Support HDTV receiving
  - 4:3 & 16:9 selectable aspect ratio
  - Experience best video quality at high resolution up to 1080i

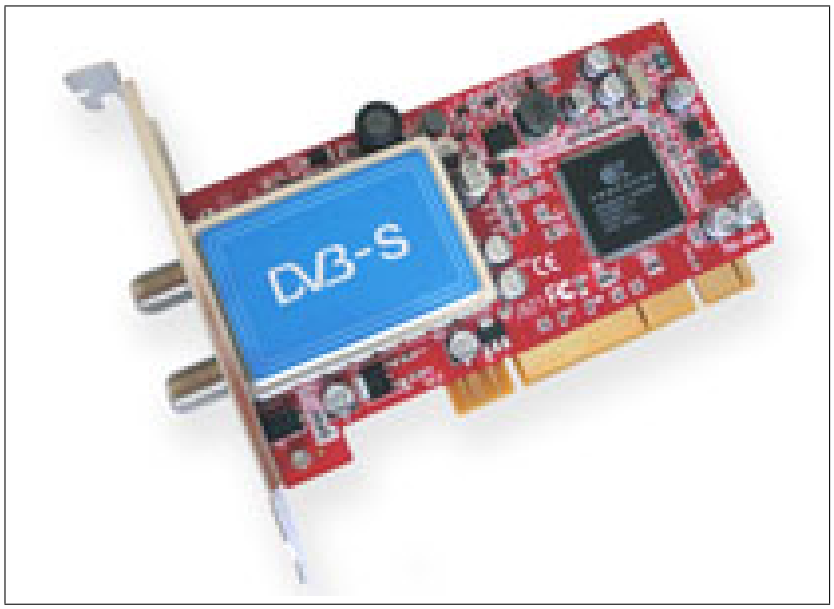

Figure 25.1: TBS PCI DVB-s Card

- Internet via Satellite:
  - DVB data service
  - High download speed via satellite bandwidth
- Personal Video Recording:
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Time-Shifting
- TV Function:
  - Electronic Program Guide (EPG)
  - Transponder, region, and Frequency range Auto Scan
  - Multiple Frame Capture
  - Multi Channel Preview
  - Favorite List
  - Hot Keys

Specification:

- Tuner:
  - Input terminal: F-type 75 Ohm
  - Receiving frequency: 950 2150 MHz tuning range
  - Input level: -65 -25dBm
  - Support MCPC and SCPC

- QPSK & FEC:
  - Symbol rate: 2 45Msps
  - QPSK filter: Root-raised cosine filter with roll-off 0.35
  - FEC: 1/2,2/3,3/4,5/6,7/8 and Auto
- LNB & Switch control:
  - Symbol rate: 2 45Msps
  - QPSK filter: Root-raised cosine filter with roll-off 0.35
- PCI interface
  - PCI bus: PCI 2.2 compliant
  - Host bus burst rate: 132 MB/S
  - Host bus width: 32 bit
- Demultiplexing
  - Max No. Section filtering: 32PIDs
  - Engine: software
  - Stream capture: PES & TS
- A/V Format
  - Video format: MPEG-II Main Profile & Main Level
  - Audio format: MPEG-II Audio layer I & II

25.2 PCI DVB-s2 Card

http://www.tbsdtv.com/english/product/PCIDVBS2.html

PCI DVB-S2 TV card supports both DVB-S2 and DVB-S program receiving. It support internet via satellite and dvb data downloading.

Functions:

- Digital TV & Radio receiving (DVB-S2 and DVB-S):
  - Watch digital satellite TV programs on your PC
  - Listen to digital stereo radio
  - Support DiSEqC 1.2 & 2.0
- High Definition & Crystal Clear Video Quality:
  - Support DVB-S2 HDTV
  - 4:3 & 16:9 selectable aspect ratio
  - Experience best video quality at high resolution up to 1080i
- Internet via Satellite:

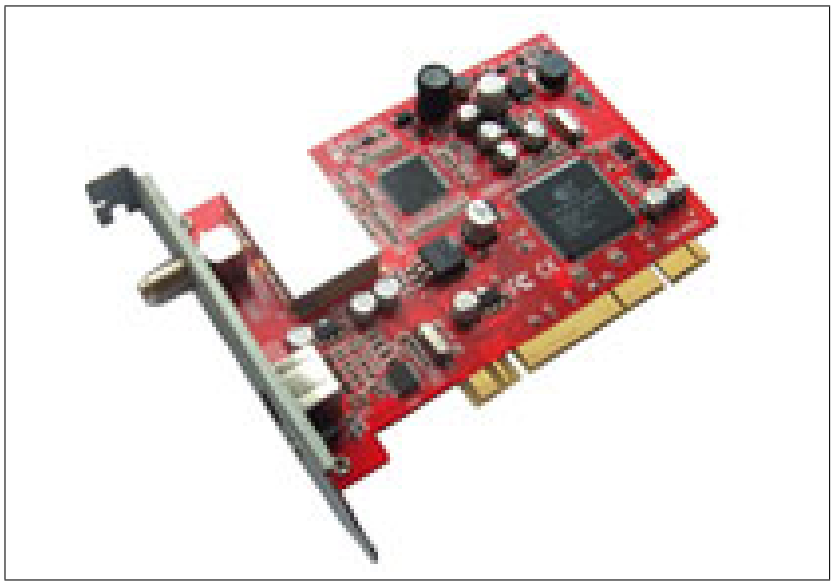

Figure 25.2: TBS PCI DVB-s2 Card

  - DVB data service
  - High download speed via satellite bandwidth
- Personal Video Recording:
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Time-Shifting
- TV Function:
  - Electronic Program Guide(EPG)
  - Transponder, region, and Frequency range Auto Scan
  - Multiple Frame Capture
  - Multi Channel Preview
  - Favorite List
  - Hot Keys

Specification:

- Tuner:
  - Input terminal: F-type 75 Ohm
  - Receiving frequency: 950 2150 MHz tuning range
  - Input level: -65 -25dBm
- QPSK & FEC:
  - 8PSK / H-8PSK / QPSK / BPSK
  - FEC: QPSK1/2,2/3,3/4,4/5,5/6,7/8,9/10 8PSK 3/5,2/3,3/4,5/6,8/9,9/10

- LNB & Switch control:
  - Symbol rate: 2 45Msps
  - 10MHz range
  - DisEqC 1.2 and 2.0 support
- PCI interface
  - PCI bus: PCI 2.2 compliant
- Demultiplexing
  - Max No. Section filtering: 32PIDs
  - Engine: software
  - Stream capture: PES & TS

25.3 PCI DVB-s2 CI Card

http://www.tbsdtv.com/english/product/PCIDVBS2CI.html

No information on the CI module is available, but it seems that it only exists for the DVB-S2 card.

Chapter 26

Technisat

http://www.technisat.com

26.1 SkyStar2 TV PCI

http://www.technisat.com/en/produkte/produkteview.php?kid=29,100&pid=1281

TechniSat offers the optimal Multimedia extension with the SkyStar 2 TV for your PC!

Apart from the reception of digital TV- and radio programs via satellite the card is also capable for data services or "High speed internet via satellite" (e.g. T-DSL via Satellit, skyDSL, Filiago or sat_speed+).

"Performance features"

- Reception of digital DVB-S television-, radio channels and teletext
- Reception of data services via satellite dish (Multicast/Unicast, MPE)

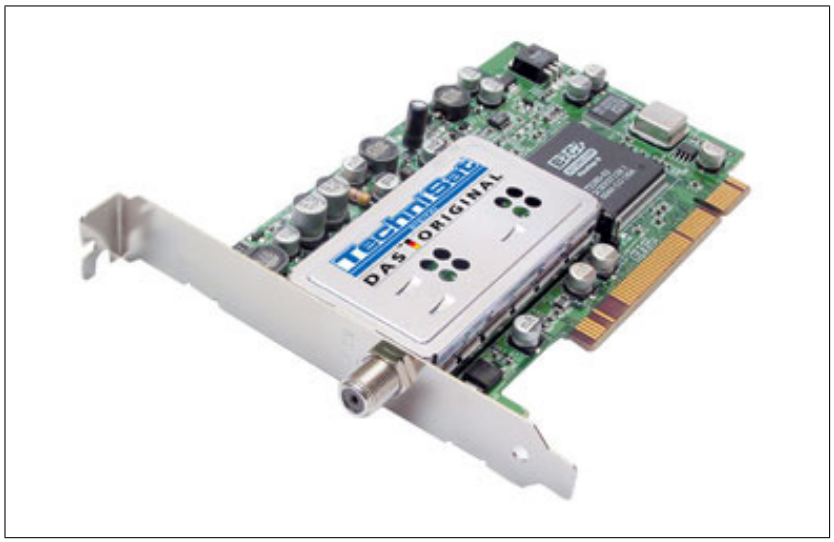

Figure 26.1: Technisat SkyStar 2 TV PCI

- Plug & Play
- PCI card
- Input Frequencies 950 - 2.150 MHz
- RF-level -65 to -25 dBm
- LNB support 13V/18V, 350mA max.
- DiSEqC 1.0
- SCPC and MCPC

Chapter 27

Technotrend

http://www.technotrend.com

27.1 TT-budget S-1401

http://www.technotrend.com/2701/TT-budget_S-1401.html

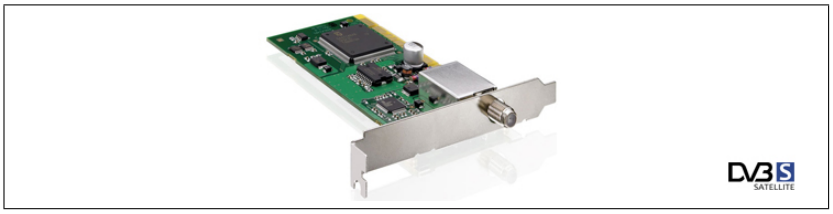

Figure 27.1: Technotrend TT-budget S-1401

- Video and audio decoding via software decoder
- Plug and play installation
- Recording and playback via TV/radio
- Teletext
- Time shift support
- Electronic Program Guide (EPG)
- LNB control: DiSEqC 1.0, tone burst
- HDTV support (only DVB-S transmission)

This card can not be extended with a CI module.

27.2 TT-budget S-1500

http://www.technotrend.com/2763/TT-budget_S-1500.html

Figure 27.2: Technotrend TT-budget S-1500

- Video and audio decoding via software decoder
- Plug and play installation
- Recording and playback via TV/radio
- Teletext
- Time shift support
- Electronic Program Guide (EPG)
- LNB control: DiSEqC 1.0, tone burst

The difference between this card and the S-1401, is that this card does not have HDTV support. However, this card can work together with a TT budget CI module.

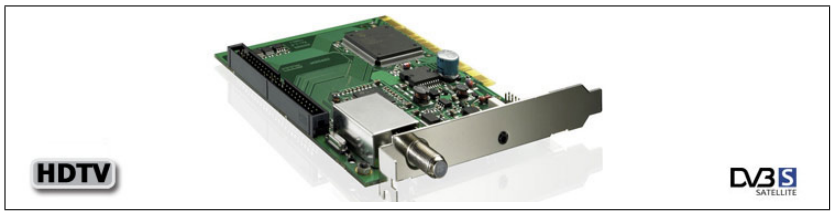

Figure 27.3: Technotrend TT-budget S2-3200

27.3 TT-budget S2-3200

http://www.technotrend.com/2764/TT-budget__S2-3200.html

- HDTV support (MPEG2 and MPEG4 / H.264)
- AC3 5.1 V software decoder
- Video and audio decoding via software decoder
- Plug and play installation
- Recording and playback via TV/radio
- Teletext
- Time shift support
- Electronic Program Guide (EPG)
- LNB control: DiSEqC 1.0, tone burst

This card is just like the S-1401 but has an AC3 software decoder. This card also supports DVB-S2 and supports the TT budget CI module.

27.4 TT-premium S-2300

http://www.technotrend.com/2765/TT-premium__S-2300.html

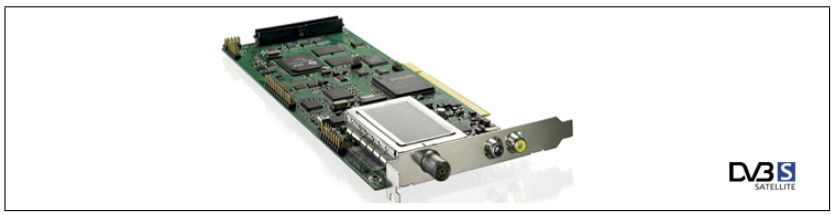

Figure 27.4: Technotrend TT-premium S-2300

- Hardware decoder for video and audio (MPEG1/MPEG2)

- Plug and play installation
- Recording and playback via TV/radio
- Teletext
- Time shift support
- Electronic Program Guide (EPG)
- LNB control: DiSEqC 1.0, tone burst
- CVBS video out
- Digital audio out via S/PDIF
- Analogue audio outs via chinch and 3,5 jack

This card has a hardware MPEG decoder and some more professional output ports. It also supports the TT premium-CI module.

27.5 TT-budget CI

http://www.technotrend.com/2720/TT-budget_CI.html

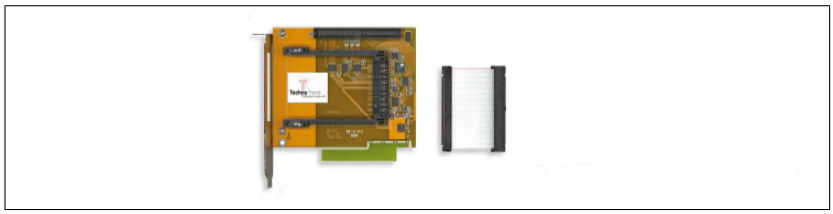

Figure 27.5: Technotrend TT-budget CI

There is not much information about this CI module, except that it's inserted into a PCI slot.

27.6 TT-premium CI

http://www.technotrend.com/2788/TT-Premium_CI.html

Figure 27.6: Technotrend TT-premium CI

This CI module can be used with 2 smartcards and fits into a 3.5 inch front bay. Unlike any other product from Technotrend that I'm interested in, this one has a manual at http://technotrend-online.com/download/documents/quickstartguides/quick%20start%20guide%20premium%20german.pdf

Unfortunately, the manual is in German and it doesn't offer much extra information.

Chapter 28

Telemann

http://www.telemann.com

28.1 SkyMedia 200

http://www.telemann.com/products/SkyMedia200.html

Features:

- Complete Digital Satellite Data/TV Broadcasting Reception including
  - DVB/MPEG-2 TV Broadcasting
  - DVB/MPEG-2 Audio Broadcasting
  - DVB-Data Broadcasting (ETSI 301 192)
- The combination of on -board Demultiplexing, together with high performance MPEG-2 decoder and PCI bridge, ensures high quality Video/Audio
- Direct Connect to TV/VCR
- On Board Graphic Overlay Function (Receiving Data/TV Simultaneously)

Figure 28.1: Telemann SkyMedia 200

Specifications:

- System capabilities
  - Fully DVB Compliant
- Demodulator
  - Waveform ..... QPSK
  - Symbol rate ..... 2 - 45MS/s(Option : Guaranteed 1 MS/s Version)
  - SCPC and MCPC capable
- Video decoder
  - MPEG-2 Main profile @ Main level
  - Video formats ..... 4 : 3, 16 : 9
  - C band and Ku band
- Audio decoder
  - MPEG-2 layer I & II (Musicam Audio)
  - Mono, Dual channel, Stereo, Joint stereo
- LNB/Tuner input
  - Connector ..... 1 x F-type
  - Input frequency ..... 950 .. 2150MHz
  - LNB supply ..... 13/18V/OFF, Max. 400mA
  - Band switch control ..... 22 KHz (DiSEqC 1.0)
- Composite Video output
  - Connector ..... 1 x RCA/Cinch
- Hi-Fi Quality Audio output

  - Connector ..... 2 x RCA/Cinch (L/R)

- IR interface
  - Channel up-down
  - Volume control
- External Smart Card Reader
  - Connector ..... Mini-DIN
- PC Bus Interface
  - Completely PCI revision 2.1 compliant(P&P)
  - 32-bit operation, full capability
- SOFTWARE
  - Control,Data and Streaming API
  - Windows'95/'98/NT and LINUX, Miniport Driver for NDIS4.0
  - VPE,Active Movie 2.0 support (Graphic Overlay Function)
  - Video/Audio/Data download simultaneously
  - Max. 32 PIDs decode simultaneously
  - Fully DVB-Data(ETSI 301 192) Compliant
- Remote control
  - Type RC3681
  - Batteries ..... 2 x 1.5V(type AAA)
- Connector summary
  - 1 x LNB input(F-type)
  - 1 x CVBS (RCA/Cinch)
  - 2 x AUDIO L/R (RCA/Cinch)
  - 1 x External Smart Card Reader & Remote Controller input
- Power
  - +5 VDC at 1.3A+12VDC at 1.2A
- General Data
  - Dimensions(wxdxh) 230x105 17mm
  - Storage temp. -40C to +90C
  - Operating temp. +5C to +50C
  - Relative humidity 10% to 95% noncondensing
  - User manual and remote control with batteries

Figure 28.2: Telemann SkyMedia 300

28.2 SkyMedia 300

http://www.telemann.com/products/SkyMedia300.html

Features:

- Complete Digital Satellite Data/TV Broadcasting Reception including
  - DVB/MPEG-2 TV Broadcasting
  - DVB/MPEG-2 Audio Broadcasting
  - DVB-Data Broadcasting (ETSI 301 192)
- The combination of on -board Demultiplexing, together with high performance MPEG-2 decoder and PCI bridge, ensures high quality Video/Audio
- Direct Connect to TV/VCR
- On Board Graphic Overlay Function (Receiving Data/TV Simultaneously)
- ViACCESS CAS Embedded

Specifications:

- System capabilities
  - Fully DVB Compliant
- Demodulator
  - Waveform QPSK
  - Symbol rate 2 45MS/s(Option:Guaranteed 1MS/s Version)
  - SCPC and MCPC capable
- Video decoder
  - MPEG-2 Main profile @ Main level
  - Video formats 4 : 3, 16 : 9

  - C band and Ku band
- Audio decoder
  - MPEG-2 layer I & II (Musicam Audio)
  - Mono, Dual channel, Stereo, Joint stereo
- LNB/Tuner input
  - Connector 1xF-type
  - Input frequency 950..2150MHz
  - LNB supply 13/18V/OFF, Max. 400mA
  - Band switch control 22KHz (DiSEqC2.0)
- Composite Video output
  - Connector 1 x RCA/Cinch
- Hi-Fi Quality Audio output
  - Connector 2 x RCA/Cinch (L/R)
- IR interface
  - Channel up-down
  - Volume control
- External Smart Card Reader
  - ISO 7816
- PC Bus Interface
  - Completely PCI revision 2.1 compliant(P&P)
  - 32-bit operation, full capability
- SOFTWARE
  - Control,Data and Streaming API
  - Windows'95/'98/NT and LINUX, Miniport Driver for NDIS4.0
  - VPE,Active Movie 2.0 support (Graphic Overlay Function)
  - Video/Audio/Data download simultaneously
  - Max. 32 PIDs decode simultaneously
  - Fully DVB-Data(ETSI 301 192) Compliant
- Remote control
  - Type RC3681
  - Batteries 2 x 1.5V(type AAA)
- Connector summary
  - 1 x LNB input(F-type)
  - 1 x CVBS (RCA / Cinch)
  - 2 x AUDIO L/R (RCA /Cinch)
  - 1 x External Smart Card Reader & Remote Controller input

- Power
  - +5 VDC at 1.3A, +12 VDC at 1.2A
- General Data
  - Dimensions (wxdxh) 230x100x17mm
  - Storage temp. -40C to +90C
  - Operating temp. +5C to +50C
  - Relative humidity 10% to 95% noncondensing
  - User manual and remote control with batteries

The differences between this card and the SkyMedia200 are: ViACCESS CAS Embedded, DiSEqC2.0 instead of 1.0 and ISO 7816 instead of a mini-DIN for the external CI module.

28.3 SkyMedia 200D

http://www.telemann.com/products/SkyMedia200D.html

Figure 28.3: Telemann SkyMedia 200D

Features:

- Complete Digital Satellite Data Reception including
  - DVB-Data Broadcasting (ETSI 301 192)
  - Data Piping
  - Data Streaming
  - Muti protocol Encapsulation
  - Data/Object Carousel
- QPSK Demodulator (2 45MS/s)

- Support high speed Internet (Up to 25Mbps per PID)
- On Board Smart Card Reader

Specifications:

- System capabilities
  - Fully DVB Compliant
- Demodulator
  - Waveform QPSK
  - Modulation Format 2 45MS/s
  - SCPC and MCPC capable
- LNB/Tuner input
  - Connector 1xF-type
  - Input frequency 950..2150MHz
  - LNB supply 13/18V/OFF, Max. 400mA
  - Band switch control 22KHz(DiSEqC1.1)
- PC Bus Interface
  - Completely PCI revision 2.1 compliant(P&P)
  - 32-bit operation, full capability
- Smart Card Reader
  - ISO 7816
- SOFTWARE
  - Control,Data and Streaming API
  - Windows'95/'98/NT and LINUX, Miniport Driver for NDIS4.0
  - Max. 16 PIDs decode simultaneously
  - Fully DVB-Data(ETSI 301 192) Compliant
- Connector summary
  - 1 x LNB input(F-type)
- Power
  - +5 VDC at 1.5A max, +12 VDC at 2A max
- General Data
  - Dimensions (wxdxh) 195x100x17mm
  - Storage temp. -40C to +90C
  - Operating temp. +5C to +40C
  - Relative humidity 10% to 95% noncondensing
  - User manual

This card seems to be a stripped down version of the SkyMedia 200. It has no hardware decoders for video or audio (and thus no output ports), no remote control is included. It supports DiSEqC1.1 as opposed to DiSEqC1.0 on the SkyMedia200. Most importantly though, this card has an onboard smartcard reader using ISO 7816.

Chapter 29

TerraTec

http://www.terratec.net

29.1 Cinergy 1200 DVB-S

http://tven.terratec.net/modules.php?op=modload&name=News&file=article&sid=195

The Cinergy 1200 DVB-S turns your computer into a real multimedia heavyweight. The TV card, which is simply plugged into an available PCI slot, just needs to be connected to a satellite connection. Now all you have to do is install the Terratec Home Cinema TV software, and just like that, you're ready to receive countless channels in DVB-S standard (Digital Video Broadcasting). It's just that easy to turn your computer into a digital television with a hard drive video recorder and many other exciting options.

Wide range of recording functions In addition to the functions offered by normal home cinema systems when watching TV via computer, such as time shifting, electronic program guides (EPG) and digital video recording, the TerraTec Home Cinema offers some new functions: you can scan through current television listings via remote programming over the Internet, and you can program the system to record with just a click of the mouse. In addition, the TerraTec Home Cinema can also access the established tvtv.de service - a year's subscription is included in the purchase price. The computer boots up from standby or

Figure 29.1: TerraTec Cinergy 1200 DVB-S

sleep mode precisely when the chosen television show begins and then saves it on your hard drive automatically. It's even easier to record using the electronic program guide, or directly, while a program is in progress. No matter how you plan your recordings, they can be viewed immediately, even while the recording is in progress! The burning software included makes it easy burn your programs to CD after they've finished recording.

Perfect television viewing on your computer Your Cinergy 1200 DVB-S has even more capabilities when used in conjunction with TerraTec Home Cinema software: Automatic optimization of aspect ratio, Dolby digital (AC3) recording, teletext and subtitles, DVB-S radio support and user-defined favorites lists (genre, location), multi-tuner support, readily available help functions, and the commercial editor Cut!, which now makes it even easier to remove blocks of commercials. Sleek, and easy on your computer's resources, user-friendly, yet multi-functional - with the TerraTec Home Cinema, TerraTec has finally made the experience of watching television on your computer both real and complete!

Specifications:

- Digital TV reception via satellite (DVB-S)
- Digital TV and radio reception
- Philips SAA-7146 chipset
- Philips DVB-S tuner
- MPEG-2 and PVA recording
- Dolby Digital (AC3) support
- Time shifting
- Electronic program guide
- Teletext support
- DiSeq 1.2 LNB power supply

Chapter 30

Tongshi

http://www.tongshi.com

30.1 DVB-s PCI

http://www.tongshi.com/cp_dvb_e.htm

Tongshi DVB-S Card is used to receive satellite Digital TV program and IP data. It had been widely used in worldwide. It supports many third party applications such as ProgDVB and MyTheatre.

Specifications:

- Compliant with MPEG2 based DVB Transmission Standard
- Frequency: 950 MHz 2150 MHz
- QPSK Demodulator
- Extended Symbol rate: 2 45 MS/s
- SCPC and MCPC Capable
- Max. 90Mbps Data Rate
- Interface: PCI v2.1
- Operation System: Windows 98SE/2000/XP
- Support Guided Switch of 22KHz and DISEqC

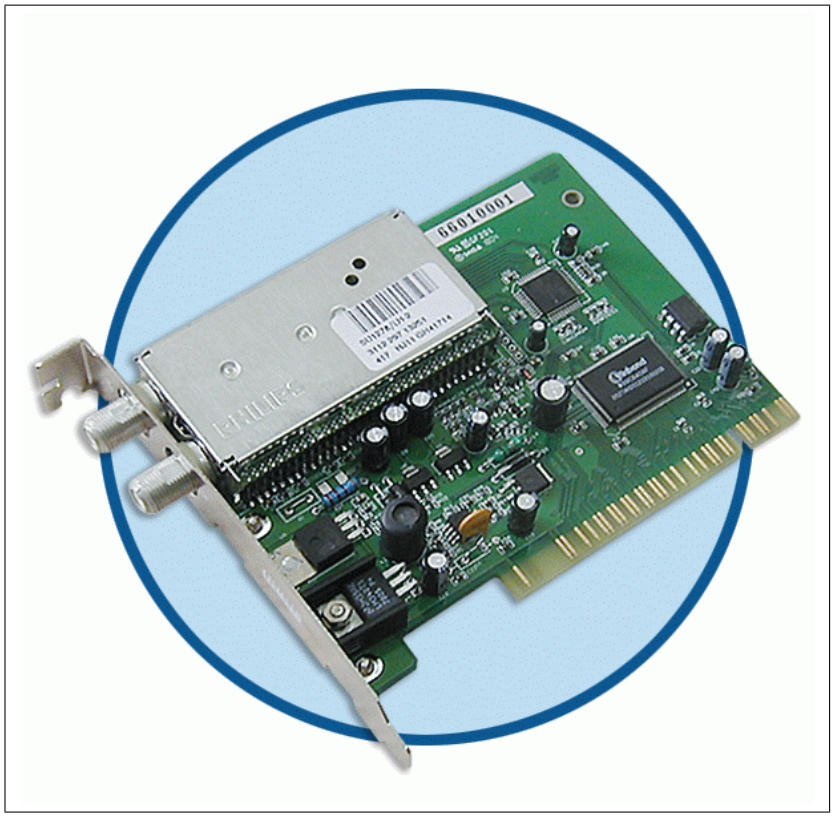

Figure 30.1: Tongshi DVB-s PCI Card

Chapter 31

TwinHan

http://www.twinhan.com

31.1 DVB-s AD-SP200(1027)

http://www.twinhan.com/product_satellite_3.asp

Here comes an ideal satellite TV card for you! TwinhanDTV Sat-Express adopts high-tech silicon tuner that efficiently reduces the board size to adapt to your mini PCs. Besides the smaller size, the state-of-the-art chip tuner technique can filter the snowy and drill effect that always happens while watching TV and offers a better TV-watching experience. If you are a fan of satellite TV, TwinhanDTV Sat-Express is ideal choice for you!

Features:

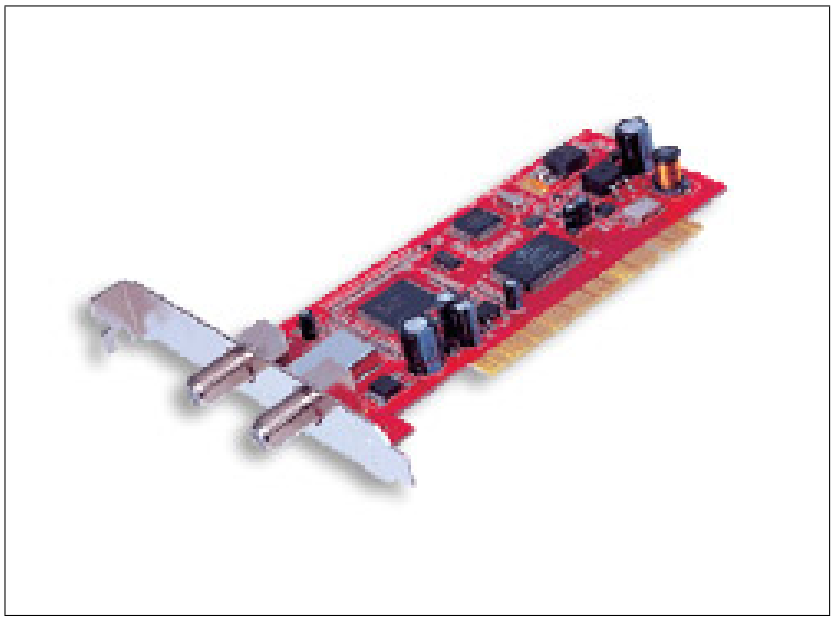

Figure 31.1: TwinHan DVB-s AD-SP200 (1027)

- Digital TV & Radio receiving (DVB-S)
  - Watch digital satellite TV programs on your PCs
  - Listen to digital stereo radio
  - Support DiSEqC 1.2 & USALS
- High Definition & Crystal Clear Video Quality
  - Support HDTV receiving
  - 4:3 & 16:9 selectable aspect ratio
  - Experience best video quality at high resolution up to 1080i
- Internet via Satellite
  - DVB data service
  - High download speed via satellite bandwidth
- Personal Video Recording
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Direct Burn to DVD format (SDTV only)
  - Time-Shifting
- TV Function
  - SAP (Language option)
  - Electronic Program Guide (EPG)
  - Transponder, region, and Frequency range Auto Scan
  - Multiple Frame Capture
  - Parental Control Password

  - Multi Channel Preview
  - Favorite List
  - Hot Keys
- Others
  - Video Quality Adjustment
  - Full function Remote Control
  - DVB Teletext

Specifications:

- Tuner
  - Input terminal: F-type 75 Ohm
  - Receiving frequency: 950 2150 MHz tuning range
  - Input level: -65 -25dBm
  - Support MCPC and SCPC
- QPSK & FEC
  - Symbol rate: 2 45 Msps
  - Punctured Codes: 1/2,2/3,3/4,5/6,7/8 and Auto
- LNB & Switch control
  - LNB Supply Voltage: 13V/18V
  - DiSEqC: 1.2
  - Support Data Burst & Tone Burst
  - Antenna and LNB Control: 22KHz Tone
- PCI interface
  - Low Profile PCI Standard
  - PCI Bus: PCI 2.2 compliant
  - Host Bus burst rate: 132 MB/S
  - Host Bus Width: 32 bit
- De-multiplexing
- Engine: Software
  - Stream capture: PES & TS
- A/V Format
  - Video format: MPEG-II Main Profile & Main Level
  - Audio format: MPEG-II Audio layer I & II

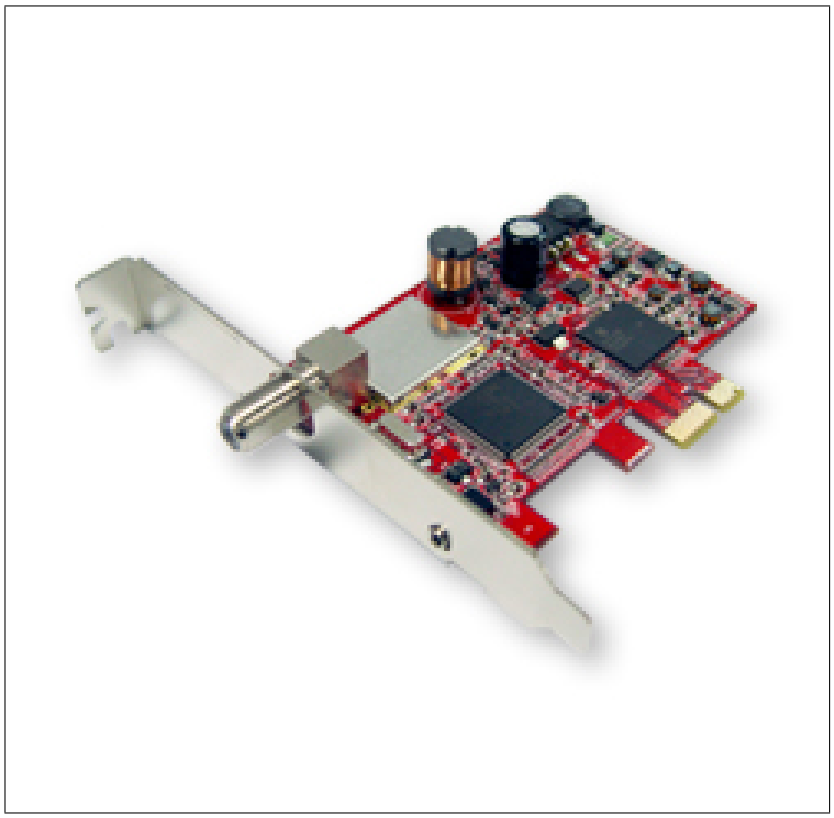

Figure 31.2: TwinHan DVB-s AS-SE200 (1028)

31.2 DVB-s AD-SE200(1028)

http://www.twinhan.com/product_AD-SE200.asp

The AD-SE200 (1028) DVB-S PCI-E TV card is one of the best solutions for you to enjoy high quality digital television shows on your PC. The AD-SE200 (1028) supports HDTV, Digital Radio, Internet via Satellite, and many other powerful features. The high-tech silicon tuner has a longer life expectancy and it brings your digital TV quality to the next level of visual entertainment. The AD-SE200 (1028) works flawlessly with Microsoft Windows MCE and Vista, it is the most reliable and affordable choice for satellite television entertainment.

Features:

- Digital TV & Digital Radio receiving (DVB-S)
  - Watch digital satellite TV programs on your PCs
  - Listen to digital stereo radio
  - Support DiSEqC 1.2 & USALS
- High Definition & Crystal Clear Video Quality

  - Support HDTV receiving
  - 4:3 & 16:9 selectable aspect ratio
  - Experience best video quality at high resolution up to 1080i
- Internet via Satellite
  - DVB data service
  - High download speed via satellite bandwidth
  - Personal Video Recording
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Time-Shifting
- TV Function
  - SAP (Language option)
  - Electronic Program Guide (EPG)
  - Multiple Frame Capture
  - Parental Control Password
  - Multi Channel Preview
  - Favorite List
  - Hot Keys

Specifications:

- Tuner
  - Input terminal: F-type 75 Ohm
  - Receiving Frequency: 950 2150 MHz Tuning Range
  - Input Level: -75 10 dbm
- QPSK & FEC
  - Symbol Rate: 2 45 Msps
  - FEC: 1/2, 2/3, 3/4, 5/6, 7/8 and Auto
- LNB & Switch control
  - LNB Supply Voltage: 13 or 18V
  - DiSEqC: 1.2
  - Support Data Burst & Tone Burst
  - Antenna and LNB Control: 22KHz Tone
  - Max. LNB Supply Current: 400MA with Short Circuit Protection
- PCI interface
  - Bus: PCI 2.2 Compliant
- De-multiplexing
  - Engine: Software

  - Streams Capture: PES and TS

- A/V Format
  - Video Format: MPEG-II Main Profile & Main Level
  - Audio Format: MPEG-II Audio Layer I & II

31.3 DVB-s AD-SP300(1034)

http://www.twinhan.com/product_satellite_1034.asp

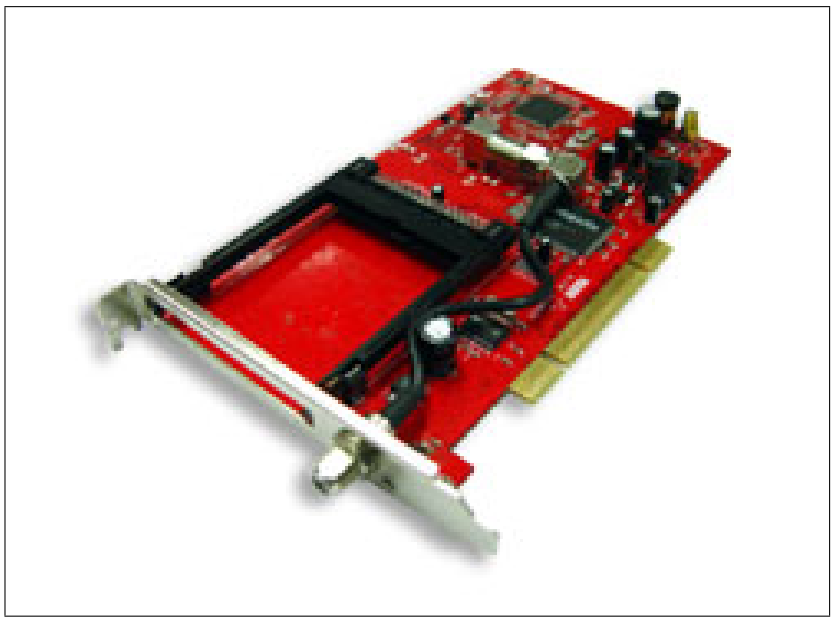

Figure 31.3: TwinHan DVB-s AD-SP300 (1034)

AD-SP300 (1034) DVB-S CI PCI card is the first satellite TV card with designed-in common interface slot, which allows you to receive both free-to-air and scrambled digital satellite channels. In possession of strong core competence in source integration, AD-SP300 (1034) DVB-S CI PCI card is compatible with most of CAMs currently on the market. Plus the powerful recording function, AD-SP300 (1034) DVB-S CI PCI card will be your best choice for watching satellite TV.

Features:

- Digital TV & Radio receiving (DVB-S)
  - Watch digital satellite TV programs on your PCs
  - Listen to digital stereo radio
  - Support DiSEqC 1.2
- Designed-In Common Interface for Pay TV receiving

  - Watch FTA & pay channels on PCs
  - You need extra CAM and smart card for pay TV receiving
- High Definition & Crystal Clear Video Quality
  - Support HDTV receiving
  - 4:3 & 16:9 selectable aspect ratio
  - Experience best video quality at high resolution up to 1080i
- Internet via Satellite
  - DVB data service
  - High download speed via satellite bandwidth
- Personal Video Recording
  - Instant & pre-scheduled record programs as MPEG II format
  - Wake Up Schedule Recording
  - Time-Shifting
- TV Function
  - SAP (Language option)
  - Electronic Program Guide (EPG)
  - Transponder, region, and Frequency range Auto Scan
  - Multiple Frame Capture
  - Parental Control Password
  - Multi Channel Preview
  - Favorite List
  - Hot Keys
- Others
  - Video Quality Adjustment
  - Full function Remote Control
  - DVB Teletext

Specifications:

- Tuner
  - Input terminal: F-type 75 Ohm
  - Receiving Frequency: 950 2150 MHz Tuning Range
  - Input Level: -65 25 dbm
- QPSK & FEC
  - Symbol Rate: 2 45 Msps
  - FEC: 1/2, 2/3, 3/4, 5/6, 7/8 and Auto
- LNB & Switch control

  - LNB Supply Voltage: 13 or 18V
  - DiSEqC: 1.2
  - Support Data Burst & Tone Burst
  - Antenna and LNB Control: 22KHz Tone
  - Max. LNB Supply Current: 400MA with Short Circuit Protection
- PCI interface
  - Bus: PCI 2.2 Compliant
  - Host Bus Burst Rate: 132MB/s
  - Host Bus Width: 32 bit
- De-multiplexing
  - Engine: Software
  - Streams Capture: PES and TS
- A/V Format
  - Video Format: MPEG-II Main Profile & Main Level
  - Audio Format: MPEG-II Audio Layer I & II

31.4 DVB-s2 AD-SP400 (1041+4046)

http://www.twinhan.com/product_satellite_s2_CI.asp

> The AD-SP400 DVB-S2 CI PCI card is among one of the powerful TV cards that is fully compliant with DVB-S2 Broadcasting. It is definitely the best solutions for receiving free digital satellite TV programs and radio on PC. With the optional CI PCI card, you can enjoy scrambled high-definition quality satellite channels by inserting CAM and smart card. For digital TV application, you can record and playback any programs as you like and wont miss any of them. Just enjoy your digital life without limit!

Specification:

- Tuner
  - Input terminal: F-type 75 Ohm
  - Receiving Frequency: 950 2150 MHz Tuning Range
  - Input Level: -65 25 dbm
- Demodulator & FEC
  - Symbol Rate: 2 45 Msps
  - FEC
    - DVB-S: 1/2, 2/3, 3/4, 5/6, 7/8
    - DVB-S2: 1/2,3/5,2/3,3/4,4/5,5/6,8/9,9/10

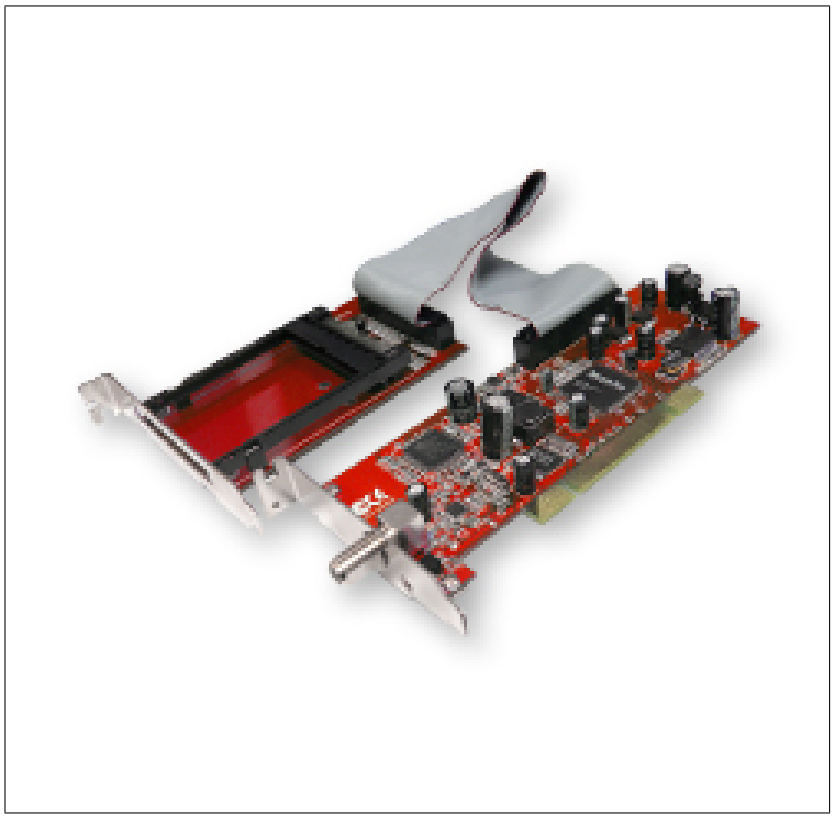

Figure 31.4: TwinHan DVB-s2 AD-SP400 (1041+4046)

- LNB & Switch control
  - LNB Supply Voltage: 13 or 18V
  - DiSEqC: 1.2 & USALS
  - Support Data Burst & Tone Burst
  - Antenna and LNB Control: 22KHz Tone
  - Max. LNB Supply Current: 400MA with Short Circuit Protection
- PCI interface
  - Bus: PCI 2.2 Compliant
  - Host Bus Burst Rate: 132MB/s
  - Host Bus Width: 32 bit
- De-multiplexing
  - Engine: Software
  - Streams Capture: PES and TS
- A/V Format
  - Video Format: MPEG-II Main Profile & Main Level
  - Audio Format: MPEG-II Audio Layer I & II

Chapter 32 Typhoon

http://www.typhoon.de

32.1 DVB-S2 PCI Card (50669)

http://www.typhoon.de/en/art.php?p=1733

- DVB-S2 Digital TV and radio program receiver
- HDTV Support (Up to 1080i)
- Real time and scheduled recording (MPEG II / H.264)
- Remote conrol
- Time-shifting, Electronic Program Guide (EPG) and Teletext

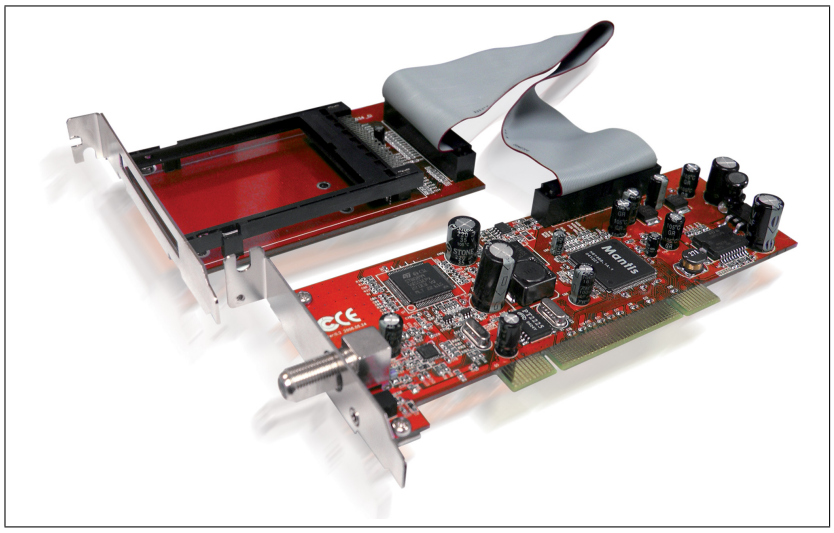

Figure 32.1: Typhoon DVB-S2 PCI Card (50669)

32.2 DVB-S TV PCI Card (50679)

http://www.typhoon.de/en/art.php?p=812

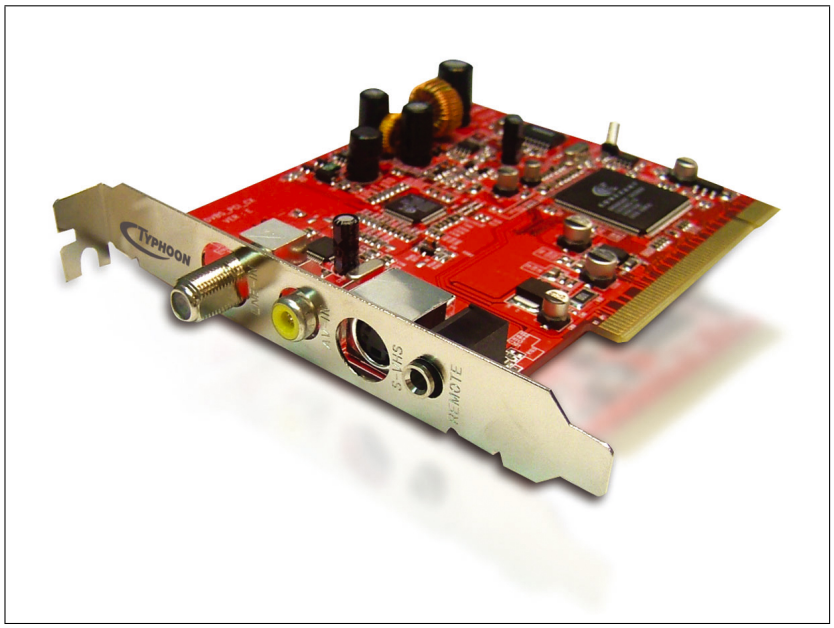

Figure 32.2: Typhoon DVB-S TV PCI Card (50679)

With Typhoon DVB-S TV PCI card, you can watch the Digital Satellite TV on your PC. The Typhoon DVB-S TV PCI card is a digital satellite receiver card that allows you to access free-to-air digital satellite TV using satellite dish. Our product can be used to record TV programs directly to your PC's hard disk in MPEG-2 (Program Stream) format. With the DTVR application, you can pause live TV and continue from

where you left with the TimeShift function. Scheduled Recording makes you won't miss any favorite shows, especially with a powerful function - S.R.P.O. (Scheduled Recording in Power-Off Mode) You can easily converter any video files from avi, mpg, etc with MPEG Converter and then edit your favorite video files with MPEG Editor. Finally, you can burn a DVD/VCD/SVCD with DVD Burn. Also includes a fully featured Infrared Remote Control that lets you access every feature with a simple press of a button, especially you can easily shut-down your PC via the remote controller.

Features:

- Watch FREE Digital Satellite TV program and Radio (not DAB) on PC
- User-Friendly and Powerful DTVR application
- Enhanced 16:9 Wide-Format Display
- Auto Channel Scan and Name Recognition
- Multiple Channel Preview
- TV Video always on the top of the monitor screen
- Support EPG Function (DVB Standard)
- Support TimeShift - Record & Playback Live TV Program at the same time
- Support Real-Time Digital Video Recording in MPEG2 (Program Stream) format
- Support Scheduled Recording
- Support Still Image Capture in JPEG or BMP format
- Support Picture-In-Picture (PIP) function
- Additional AV/S Video Input for Connect Other Video Sources. (such as DVD Player/ VCD/ VHS/ Camcorder)
- SRPO - Schedule-Recording in PC Power-Off Mode
- Power-Off PC by Remote Controller
- Other Valued Software:
  - MPEG Converter
  - MPEG Editor
  - DVD Burn

Specifications:

- Processors Conexant CX23881 PCI Bridge
- LG QPSK NIM Tuner
- Input level: -65 25dBm
- QPSK IC: STV0299B

- Video Input:
  - TV Input - 75 Ohm
  - Composite Video
  - S-Video
- Receiving Frequency: 950 2150 MHz tuning range
- Symbol rate: 1 45 Msps
- Code Rate: 1/2, 2/3, 3/4, 5/6 and 7/8
- LNB supply voltage: 13V/18V
- Supports Data Burst & Tone Burst
- DiSEqC 1.1 & 2.x compatible
- Antenna and LNB control: 22KHz Tone
- Package contents:
- Typhoon DVB-S TV PCI Card
- Installation CD-ROM
- Installation Manual
- Remote Controller and Sensor

32.3 TV SAT DVB-S CARD CI PCI (50689)

http://www.typhoon.de/en/art.php?p=928

The Typhoon Sat TV DVB-S PCI card offers you the capability to view Digital Satellite TV programs in your desktop PC(depend on services).

Using the latest TV Satellite Tuner in the market, the Typhoon Sat TV DVB-S PCI card lets you work and play together or stay in touch with the world while running applications in your PC. Comes with applications to let you play Video CDs, record video clips, Videotext and play DVDs.Specifications subject to changes without further notifications.

Features:

- View Digital TV from the PC
- DVB standards
- View VCDs and DVDs - PowerDVD
- Digital TV services - GlobeDVB
- Neuer Dolby-Digitaldecoder mit besserer Qualitt und verbesserter Decodierprzision.
- Von Dolby Laboratory fr

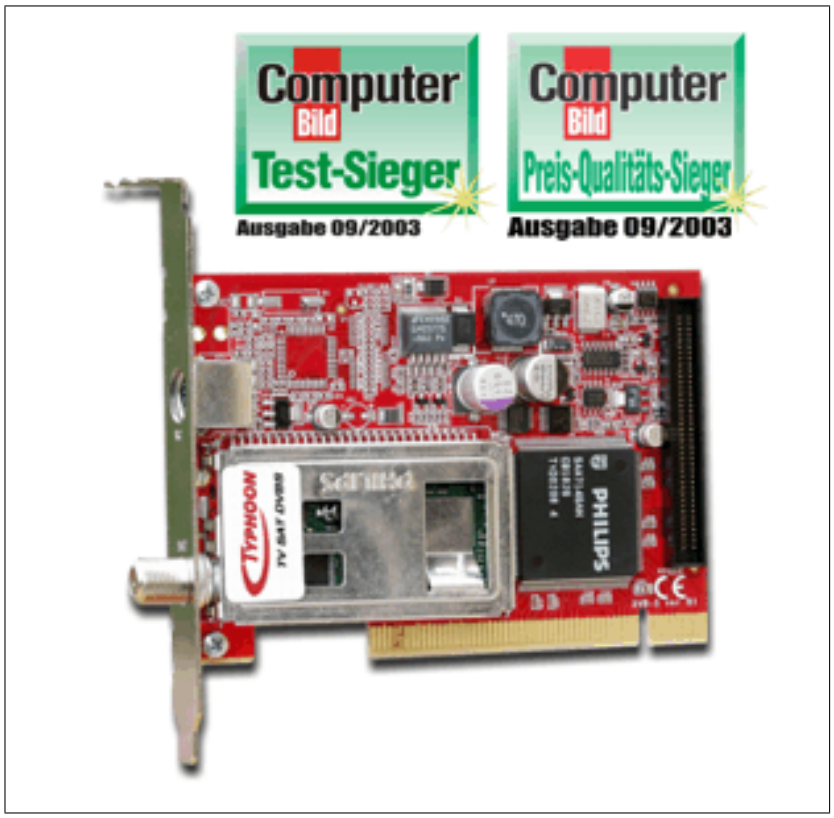

Figure 32.3: Typhoon TV SAT DVB-S CARD CI PCI (50689)

- 2/4/6-Kanal-Decodierung zugelassen Zustzlicher Dolby Pro-Logic-Decoder fr Verwendung von 4/6-Kanal-Soundkarten
- Erweiterter MPEG-Videodecoder fr ein klareres Bild und ungewhnlicher Anzeigequalitt fr VCD und DVD
- Firmeneigene Technologie fr Doppelte Untertitel
- Neue i-Power-Seiten fr das Neueste ber DVDs und Ressourcen
- Von Microsoft WHQL (Windows Hardware Quality Lab)
- zugelassen fr Windows Millennium, Windows 2000 und Windows 98
- Digitalzoomfunktion
- Rcklufige Wiedergabe in Zeitlupe
- Sprachversionen DE, EN, FR, SP, IT - weitere in Vorbereitung

Specifications:

- Philips Tuner
- Philips SAA7146AH Chipset
- Anschlsse:

- Extern: F-Connector fr LNB Anschluss
- Intern: CI- Interface
- GlobeDVB - DolbyDigitalTM AC3 Aus- und Weitergabe ber eine AC3-fhige Soundkarte - EIT Untersttzung (Short Event/Extendet Event Information) - 24Std Programm-Vorschau ber die EIT (Senderabhngig) - Audio/Video-Aufnahme in PVA, MPEG2 oder direkt MPEG2+AC3 - Programmierbare Aufnahme ber den Electronic Program Guide (EPG) - Sofortaufnahme mglich (Quickrecord) - Overlaydarstellung mglich (VGA-Adapter abhngig) - BOB Deinterleaced Modus/ Videoblitter - direktSchreiben in Videospeicher Modus - OSD (OnScreenDisplay) Kanalinfo und Steuerung - Umfangreiche Einstellungen des OSD - CI Untersttzung, Empfang von PayTV Voraussetzung ist ein CI-Adapter und CI-CAM (Irdeto, Seca, Viaccess etc.) - Empfang von NVOD Diensten z.B. PremiereWorld Cinedom - Empfang von NVOD Subkanlen mglich z.B. PremiereWorld Sport 1 Bundesliga oder Formel1 - Umschaltung der Sprache (Senderabhngig) - Umfangreiche DiSEqCTM Einstellungen - DiSEqCTM Rotor-Steuerung - Sendersuchlauf fr Kabel und Satkarten - Kanallisten Import (DVB2000-Format .dvb, TT-Format .tpr) - Eigene Treiberplatform - Strukturierte Programmlisten (TV, Radio, Favoriten) - Intelligenter Kanalfinder - Empfang von Teletext mit Mausnavigation- u.v.m. - Sprachversionen DE, EN - weitere in Vorbereitung

The specifications seem to be malformatted on the website.

32.4 TV SAT CI PCI (50674)

http://www.typhoon.de/en/art.php?p=1489

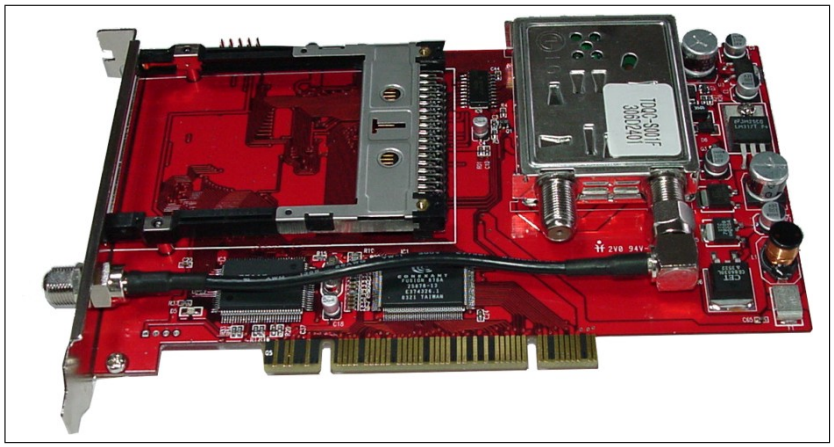

Figure 32.4: Typhoon TV SAT CI PCI (50674)

Typhoon TV SAT CI PCI Card upgrades your computer capability to watch digital TV & Radio programs via a PCI interface Card from Satellites broadcasting. With the Typhoon TV SAT CI PCI Card, users are able to watch, record & play back high quality digital TV program on their computers.

Built with PCI 2.2 specification for 32bit interface performances. TYPHOONDTV application features Digital Satellite TV and Radio program playback and recording capabilities. Decode your favourite programs in MPEG II format. Comes with PCMCIA II interface for Pc Card CAM module installation.

Features:

- Support DVB protocol
- Digital Satellite TV and Radio Program Receiving
- Real time Digital Video Recording and Schedule Recording
- Time-shifting
- Electronic Program Guide (EPG)
- Multi-Channel Preview (FTA Channels Only)
- Transponder, Satellite Auto Scan
- View and Record Different Channels simultaneously in the same Transponder
- MPEG-II Software Decoding
- Software Upgradeable
- Still Frame Capture
- Favorite List
- Teletext
- PCMCIA Common Interface (DVB EN50221) (For Typhoon TV SAT CI)

Specifications:

- Tuner
  - Input terminal: F-type 75 Ohm
  - Receiving frequency: 950 2150 MHz tuning range
  - Input level: -65 -25dBm
  - Support MCPC and SCPC
- QPSK & FEC
  - Symbol rate: 2 45Msps
  - QPSK filter: Root-raised cosine filter with roll-off 0.35
  - Punctured codes: 1/2,2/3,3/4,5/6,7/8 and Auto
- LNB & Switch Control
  - LNB supply voltage: 13V/18V with Short Circuit Protection
  - DiSEqC: 1.2
  - Support USALS
  - Support Data Burst & Tone Burst
  - Antenna and LNB control: 22 KHz Tone
  - Max. LNB supply current: 400mA
- PCI Interface

  - PCI bus: PCI 2.2 compliant
  - Host bus burst rate: 132 MB/S
  - Host bus width: 32 bit

- De-multiplexing
  - Max No. Section filtering: 32PIDs
  - Engine: software
  - De-scrambler: DVB de-scrambler
  - Stream capture: PES & TS

- A/V Format
  - Video format: MPEG-II Main Profile & Main Level
  - Audio format: MPEG-II Audio layer I & II

32.5 PC/TV-SAT Card for PC (50804)

http://www.typhoon.de/en/art.php?p=970

Satellite television in the highest quality in your PC. The whole satellite TV comes with the TYPHOON TV-SAT Receiver to card- and software-installation and plug-in of the dish cable. Outstanding for satellite receivers is the integrated fast sationsearch who brings up all receiveable TV stations. Dont have a satellite receiver yet ? With the TYPHOON TV-SAT Receiver you dont need one. And that pays off.

The TYPHOON PC-SAT Receiver is a PCI Plug & Play card, enabling the PC to receive TV-Broadcasts, Teletext and Radio directly from the satellite dish. Minimized signallines and a high- performance videoprocessor gives you the best picture- and sound-quality. The TYPHOON TV-SAT Receiver gives you an amazing high quality TV-picture ranging from (max. PAL-Resolution 768x576) to the size of a Windows-Icon on to your Monitor. Comfortable Userinterface Programms, received from the satellite dish will be displayad by the TV scanner as icons on your desktop. One double-click and the programm of your choice fills the monitor. Beyond that:

- Sound in excellent HiFi quality
- Teletext and Radio
- Input for VCRs, camera or decoder leaves no wishes..
- Real Plug & Play
- PCI board designed for Windows 95
- Sat-TV & Sat-Radio
- Requires PCI-System (Version 2.1 or higher) and direct draw capable graphicscard
- Video Input for S-VHS and Composite Video (Mini-DIN)
- PCI-Busmastering. no cables required

- Stop and copy of TV-Stills (for further editing)
- Scaleable TV-Picture
- Automatic fast station search
- Teletext

32.6 CI Module (50636)

http://www.typhoon.de/en/art.php?p=1469

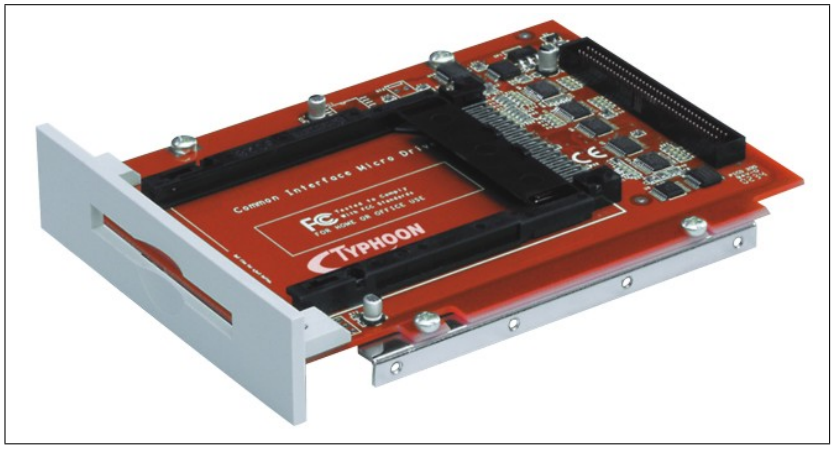

Figure 32.5: Typhoon CI Module (50636)

The Typhoon CI Module designed for DVB receiver cards with an 80-pin expansion port. The CI Module can be used with a Common Access Module (CAM) including a key card from a provider of encrypted TV programming.

The CI Module supports 3.3 Volt as well as 5 Volt CAMs with appropriate voltage being selected automatically. The module can either be inserted in a PCI slot or an external 3.5 drive bay.